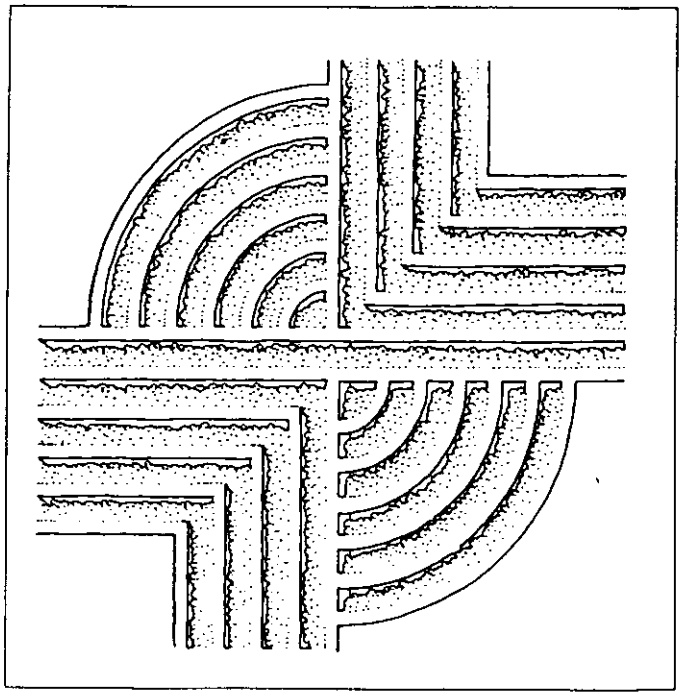
ARCHAEOLOGICAL SURVEY OF THE BERKELEY COUNTY LANDFILL EXTENSION AND PROPOSAL FOR DATA RECOVERY EXCAVATIONS AT 38BK1669 AND 38BK1670



CHICORA RESEARCH CONTRIBUTION 131

ARCHAEOLOGICAL SURVEY OF THE BERKELEY COUNTY LANDFILL EXTENSION AND PROPOSAL FOR DATA RECOVERY EXCAVATIONS AT 38BK1669 AND 38BK1670

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Chicora Research Contribution 131

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February 4, 1994

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ABSTRACT

This study presents the results of an intensive archaeological survey of the 400 acre proposed Berkeley County landfill extension tract. The primary purpose of this investigation is to identify and assess the archaeological remains in the proposed development tract.

As a result of this work, four archaeological sites were examined. These sites include 38BK1668, 38BK1669, 38BK1670, and 38BK1671. One standing structure was located which appears to date to the twentieth century and is believed to be associated with a farm complex identified as 38BK1668. This farm complex contains a two-story farm house and various outbuildings which are in failure or rapidly approaching failure. Preservation Consultants (1990) suggested that this structure may have been built circa 1858, but has been significantly altered which has compromised its integrity. The archaeological remains associated with the structure do not support a nineteenth century construction date.

Two sites were located which are associated with the eighteenth century occupation of Oakley Plantation. These sites represent the remains of a main house (38BK1669) and a slave row (38BK1670).

Another site (38BK1671) appears to represent a trash dump associated with early to mid-twentieth century use of the property.

Of these four sites, two (38BK1669 and 38BK1670) are recommended as eligible for inclusion on the National Register of Historic Places. Both sites have the ability to address significant research questions regarding poorly documented eighteenth century plantation sites.

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INTRODUCTION

This investigation was conducted by Ms. Natalie Adams of Chicora Foundation, Inc. for Mr. Ken Smoak of Sabine & Waters Environmental Land Management Consultants. The proposed 200 acre landfill extension tract is located approximately seven miles south of Monck's Corner. The tract is bounded to the north by Molly Branch and privately owned property, to the east by U.S. Highway 52, to the south by Oakley Road (S-8-50), and to the west by privately owned property (Figure 1).

In the south central portion of the tract is a dirt road which leads north to a farm complex. An overgrown dirt road is found running east/west along the northern property boundary. There are several fallow fields located in the extreme southern and northern portions of the tract. Elsewhere, vegetation consisted of either hurricane damaged woods or mixed pine/hardwood forest with a thick understory of briers. Most of these vegetated areas were located on poorly drained soils. Developments will likely consist of additional roads, utilities, building construction, as well as land filling. These activities have the potential to damage or destroy archaeological resources if such resources are within the affected portion of the tract.

This study is intended to provide a detailed explanation of the archaeological survey of the landfill extension tract, and the findings. Chicora received a request for a proposal on October 15, 1993. This proposal was accepted on January 5, 1994.

Dr. Michael Trinkley examined the site files of the S.C. Institute of Archaeology and Anthropology during the reconnaissance survey, and a project area map was faxed to the S.C. Historic Preservation Office on September 14, 1993 requesting information on National Register sites and previous architectural surveys. A verbal response from Dr. Tracy Powers indicated that no National Register properties are located in the project area. However, a standing structure survey for the county identified what was believed to be an 1858 house associated with Oakley Plantation (Control Number U/19/0000/339 0034). The structure had been previously determined ineligible because the building had apparently undergone a number of repairs which greatly compromised its integrity (Dr. Tracy Powers, personal communication 1993).

The field investigations were undertaken by Ms. Natalie Adams and Ms. Liz Corsini between January 18 and January 22, 1994. The laboratory processing of the resulting collections, curation preparations, and report production have taken place at Chicora Foundation's laboratories in Columbia on January 23 and 24, 1994.

NATURAL ENVIRONMENT

The project area is situated in the Lower Coastal Plain. The topography in the area is gently rolling and drops off rather sharply where the property meets the swamps of Molly Branch. Elevations range from about 30 to 50 feet above mean sea level (MSL).

Berkeley County is drained by three significant river systems: the Santee, Wando, and Cooper rivers. The Santee has a large freshwater discharge and forms the northern boundary with neighboring Georgetown County. The Wando is a coastal river, being dominated by tidal action. The Cooper River, which flows through the center of the County, was also originally a tidal river, but it has been modified by a large volume of fresh water diverted from the Santee through Lakes Marion and Moultrie. In addition, there are a number of broad, low-gradient interior drainages that are present either as extensions of tidal streams or flooded bays and swales. Molly Branch, a tributary of Cooper River, is found along the northern border of the project area.

As previously mentioned, Berkeley County is made up of one broad physiographic area, often called the lower Atlantic Coastal Plain or the Atlantic Coast Flatwoods. The surface soils are almost entirely sedimentary and were transported into the area from elsewhere. The geology of Berkeley County is characteristic of the region; the formations covering the surface date from the Pleistocene and include sands, clays, gravels, and phosphates.

In general the soils in lower Berkeley are part of the Wahee-Duplin-Lenoir association. They tend to be somewhat poorly to moderately well drained and have a loamy surface layer with a clayey subsoil. The soils in the survey area consist of well drained Caroline fine sandy loam, moderately well drained Duplin fine sandy loam, moderately well drained Goldsboro loamy sand, somewhat poorly drained Lenoir fine sandy loam, somewhat poorly drained Lynchburg fine sandy loam and Wahee loam, and poorly drained Coxville fine sandy loam, Rains fine sandy loam and Meggett loam. Typically the better drained soils are found on sandy ridges, while the less well drained soils are found associated with wetlands or creeks.

Berkeley County has a subtropical climate, characterized by warm summers, mild winters, and adequate precipitation fairly evenly spread throughout the year. Except in the summer, when maritime tropical air controls the climate of the area, the daily weather patterns are controlled by west to east moving pressure systems and associated fronts.

Yearly precipitation averages 47 inches, but ranges from 39 to 55 inches. The growing season, from April to September, receives an average of 31 inches or about 66% of the yearly total. The average length of the freeze-free growing season is approximately 260 days, although frosts can occur as early as October 26 and as late as April 15 (Long 1980:46).

Mills remarked in 1826 that Carolina was similar to European climates, lying at a similar latitude. He noted that:

> in comparing the climate of South Carolina, with similar climates in Europe, we find it lying under the same atmospheric influences with Aix, Rochelle, Montpelier, Lyons, Bordeaux, and other parts of France; with Milan, Turin, Padua, Mantua, and other parts of Italy (Mills 1972 [1826]:133).

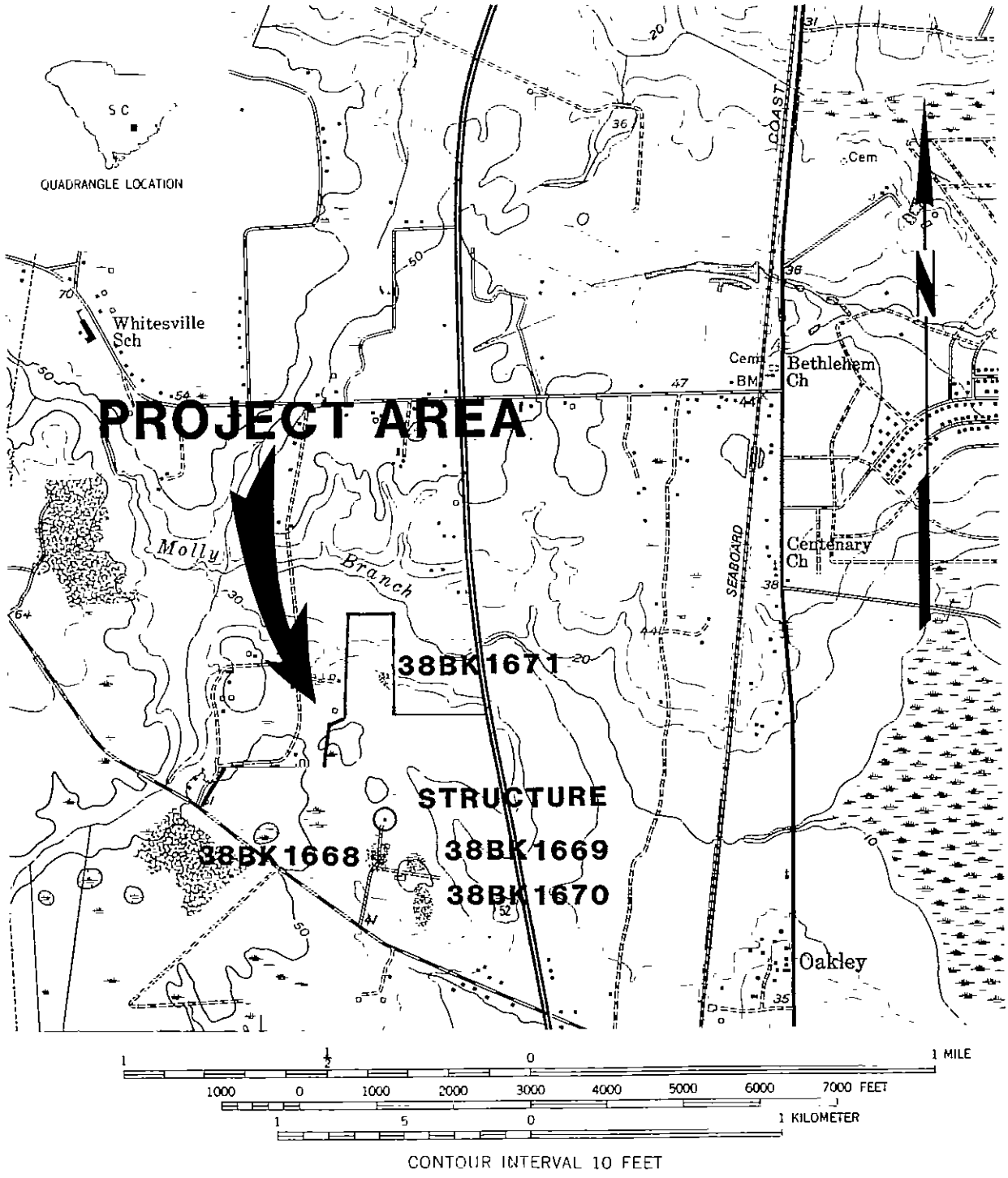

Figure 1. Location of the project area on the 1979 Mt. Holly USGS quadrangle.

The coastal region is a moderately high risk zone for tropical storms, with 169 hurricanes being documented from 1686 to 1972 (0.59 per year) (Mathews et al. 1980:56). One of the most devastating in the eighteenth century was the hurricane of September 15, 1752. One report listed 92 people drowned, although the death toll, especially among the African American slaves was likely much higher. The storm also had considerable long-term effects and Calhoun notes that:

> the destruction of trees was severe; one plantation owner's loss was assessed at $50,000 and many of those trees which survived were "heart-shaken," and unfit for use. Crops were even more damaged as the storm followed a severe drought. It was necessary to enact laws to regulate the exportation and sale of corn, "Peafe," and small rice, so that "the poor may be able to purchase Provisions at a moderate Price" (Calhoun 1983:9).

Speaking of the coastal plain Braun observed that:

> the vegetation of this region is in part warm temperate-subtropical, in part distinctively coastal plain, and in part temperate deciduous. It is made up of widely different forest communities - coniferous, mixed coniferous and hardwood, deciduous hardwood, and mixed deciduous and broad-leaved evergreen hardwood - interrupted here and there by swamps, bogs, and prairies. The large number of unlike communities is related to the diverse environmental conditions of the region (Braun 1974:282)

Indeed, an examination of the region around Berkeley County reveals tremendous diversity. One detailed study revealed a mosaic including the oak-hickory-pine forest common to upland areas, oak- gum-bald cypress forest typical of the southern floodplains, pine forests found in mesic to xeric upland sites, mesophytic broadleaved forests on more mesic slope sites, old rice fields, and a variety of swamp forests such as the tupelo-cypress, low hardwood, and ridge hardwoods (Federal Power Commission 1977). All of these forest types have different dominants and different understory vegetation (see Barry 1980).

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Archaeological Investigations

In September of 1993, Chicora Foundation performed a reconnaissance level survey of the proposed landfill extension tract (Adams 1993). Four archaeological sites and one standing structure were located.

38BK1668 consisted of a complex of buildings including a farmhouse and 11 additional structures or ruins. The complex had been previously recorded by Preservation Consultants, Inc. as U/19/0000/339 0034. The farmhouse was believed to have been constructed circa 1858, but was thought to have been significantly altered and was recommended as not eligible for inclusion on the National Register of Historic Places. During the reconnaissance, artifacts dating to the very late nineteenth and early twentieth century were recovered. No artifacts diagnostic of the mid nineteenth century were identified.

38BK1669 consisted of a scatter of mid eighteenth to early nineteenth century remains in a plowed field. Shovel testing and surface collection suggested that the site represented the remains of a plantation main house measuring approximately 300 by 300 feet.

38BK1670 consisted of a scatter temporally similar to 38BK1669. However, ceramics were primarily colonowares suggesting that the site represented a slave settlement. A small prehistoric component was also identified. Based on shovel testing and surface collection, this site measured approximately 300 feet east-west by 600 feet north-south.

38BK1670 was an early to mid twentieth century scatter on a side slope near Molly Branch. The site contained primarily bottle glass and probably represents a dump rather than a habitation site.

One standing structure (containing no recovered archaeological remains) was located just north of 38BK1668. The structure probably represents a farm manager's house associated with 38BK1668.

Previous archaeological investigations in Berkeley County consist of a number of surveys including the work by Brooks and Scurry (1979) at the Amoco Realty property. Excavations at prehistoric sites in the county are few. Most notable are the works by Anderson et al (1982) and Brooks and Canout (1984). Trinkley (1980; 1990a) provides a synthesis of Coastal Plain Woodland Period occupation. This previous research has shown that prehistoric sites in the region tend to be located on elevated, well drained soils, or near the margins of swamps.

Brooks and Scurry (1979) found that the bulk of the sites components will be Middle to Late Woodland, since the high sea level stands during these periods are thought to have restricted the dispersion of resources such as large mammals and forest products. Also, sites are expected to be small and exhibit low artifact diversity since the use of extractive sites is brief, the sites represent a narrow range of activities, and group size was small. A reconnaissance survey of Mt. Holly Plantation by Poplin et al. (1978) located few prehistoric sites. Poplin et al. (1978:18) believed that the poor quality of soils in the area may have attributed to the low density of occupation. Based on the locations of prehistoric sites on the Crowfield development tract, Elliot (1987) concluded that freshwater swamp and swamp margin resources were the main attraction resulting in settlement adjacent to the swamp.

For historic sites, South and Hartley (1980) found plantations to be located on high ground adjacent

to deep water. This type of topography does not exist in the survey area which is characterized by small swamp creeks. However, the survey of portions of Mt. Holly Plantation (Poplin et al. 1978) and the Crowfield development tract (Elliot 1987), both located nearby, revealed that plantations are generally found on terrace edges adjacent to the swamps where the inland swamp rice would have been grown.

Prehistoric Synopsis

The Paleo-Indian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977). The Paleo-Indian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989:36-38).

At least 15 Paleo-Indian projectile points have been found in Berkeley County (Goodyear et al. 1989:33) all concentrated along the Cooper River drainage. This pattern of artifacts found along major river drainages has been interpreted by Michie to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleo-Indian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleo-Indian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleo-Indian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Archaic period assemblages, characterized by corner-notched, side-notched, and broad stemmed projectile points, are common in the vicinity, although they rarely are found in good, well-preserved contexts.

The Woodland period begins, by definition, with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast and much later in the Carolina Piedmont, about 500 B.C. It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2000 to 500 B.C. was a period of tremendous change.

The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish. Various calculations of the probable yield of deer, fish, and other food sources identified from some coastal sites indicate that sedentary life was not only possible, but probable. Further inland it seems likely that many Native American groups continued the previous established patterns of band mobility. These frequent moves would allow the groups to take advantage of various seasonal resources, such as shad and sturgeon in the spring, nut masts in the fall, and turkeys during the winter.

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 1640 is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest coastal phases are named the Savannah and Irene (known as Pee Dee further inland) (A.D. 1200 to 1550).

The history of the numerous small coastal Indian tribes is poorly known. As Mooney noted, the coastal

tribes:

> were of but small importance politically; no sustained mission work was ever attempted among them, and there were but few literary men to take an interest in them. War, pestilence, whiskey and systematic slave hunts had nearly exterminated the aboriginal occupants of the Carolinas before any body had thought them of sufficient importance to ask who they were, how they lived, or what were their beliefs and opinions (Mooney 1894:6).

In truth, our knowledge of these groups has also been limited because too few scholars have taken an active interest in the primary sources and there has been too little desire to evaluate critically the early research by Mooney (1894) and Swanton (1952). For South Carolina Anderson (1989:117- 118) briefly notes the current status of ethnohistoric research.

Historic Synopsis

The English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lord Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop who marketing would provide great wealth through the mercantile system.

By 1680 the settlers of Albemarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers. This new settlement at Oyster Point would become modern-day Charleston. The move provided not only a more healthful climate and an area of better defense, but:

> [t]he situation of this Town is so convenient for public Commerce that it rather seems to be the design of some skillful Artist than the accidental position of nature (Mathews 1954:153).

Early settlers came from the English West Indies, other mainland colonies, England, and the European continent. It has been argued that those from the English West Indies were the most critical to the future of the colony, as they brought with them a strong agrarian concept, involving both staple crops and slave labor. These settlers were called the "Goose Creek men", many of them settling near the present town of Goose Creek (Sirmans 1966).

Early agriculture experiments which involved olives, grapes, silkworms, and oranges were less than successful. While the Indian trade was profitable to many of the Carolina colonists, it did not provide the proprietors with the wealth they were expecting from the new colony. Consequently, the cultivation of cotton, rice, tobacco, and flax were stressed as these were staple crops whose marketing the proprietors could easily monopolize.

Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time it not only provided the proprietors with an economic base the mercantile system required, but it was also to form the basis of South Carolina's plantation system (Carpenter 1973). Over production soon followed, with a severe decline in prices during the 1740s.

This economic down swing encouraged planters to diversify and indigo was introduced (Huneycutt 1949:33). Indigo complemented rice production since they were grown in mutually exclusive areas. Both, however, were labor intensive and encouraged the large scale introduction of slavery.

South Carolina's economic development during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By 1710 slaves outnumbered free people in South

Carolina and by the 1730s slaves were beginning to be concentrated on a few, large slave-holding plantations. By the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). The Charleston area had a slave population greater than 50% of the total population by 1790. This imbalance between the races, particularly on remote plantations, may have lead to greater "freedom" and mobility (Friedlander in Wheaton et al. 1983:34). By the antebellum period this trend was less extreme.

Scholars have estimated that at the end of the colonial period, over half of eastern South Carolina's white population held slaves, although few held very large numbers. Hilliard (1984:37) indicates that more than 60% of the Charleston slaveholders by 1860 owned fewer than 10 slaves.

From another perspective Zierden and Calhoun note that:

> Charleston was the economic, institutional and social center of the surrounding region. The necessity of transacting business in Charleston drew planters eager to transform their crops into cash or goods...it [was] virtually imperative for a planter interested in society to reside in Charleston at least occasionally (Zierden and Calhoun 1984:36).

They argue that Charleston provided an opportunity for conspicuous consumption, a mechanism which allowed the display of wealth accumulated from the plantation system (with this mechanism continuing through the antebellum period). Scardaville (in Brockington et al. 1985:45) notes that the plantation system which brought prosperity through the export of staple crops also "made the colony...highly vulnerable to outside market and political forces."

The most obvious example of this is the economic hardship brought on by the American Revolution. Not only was the Charleston area the scene of many military actions, but Charleston itself was occupied by the British for over 2½ years between 1780 and 1782. The loss of royal bounties on rice, indigo, and naval stores caused considerable economic chaos with the eventual "restructuring of the state's agricultural and commercial base" (Brockington et al. 1985:34).

One means of "restructuring" was the emergence of cotton as the principal cash crop. Although "upland" cotton was available as early as 1733, its ascendancy was ensured by the industrial revolution, the invention of the cotton gin in 1794, and the availability of slave labor. While "Sea Island" cotton was already being efficiently cleaned, the spread of cotton was primarily in the South Carolina interior. Consequently, Charleston benefitted primarily though its role as a commercial center.

Cotton provided about 20 years of economic success for South Carolina. During this period South Carolina monopolized cotton production with a number of planters growing wealthy (Mason 1976). The price of cotton fell in 1819 and remained low through the 1820s, primarily because of competition from planters in Alabama and Mississippi. Friedlander, in Wheaton et al. (1983:28-29) notes that cotton production in the inland coastal parishes fell by 25% in the years from 1821 to 1839, although national production increase by 123%. Production improved dramatically in the 1840s in spite of depressed prices and in the 1850s the price of cotton rose.

The Charleston area did not participate directly in the agricultural activity of the state. Scardaville (in Brockington et al. 1985:35) notes that "the Charleston area, as a result of a large urban market and a far-reaching trade and commercial network, had carved out its own niche in the state's economic system." Zierden and Calhoun remark that:

> [c]ountry merchants, planters, and strangers "on a visit of pleasure" flocked to Charleston. Planters continued to establish residences in Charleston throughout the antebellum era and "great" planters began to spend increasing amount of time in Charleston (Zierden and

Calhoun 1984:44).

In spite of this appearance of grandeur, Charleston's dependence on cotton and ties to an international market created an economy vulnerable to fluctuation over which the merchants and planters had no control.

While the wealthiest farms were those on the sea islands producing cotton (such as Edisto Island where the value of the average plantation was over $44,000), plantations in Christ Church (as well as other inland, non-cotton producing areas) had an average value of around $7,000 (Scardaville in Brockington et al. 1985:39). Christ Church Parish grew only 1.7% of the district's cotton, although it formed 10.1% of the improved acreage. An examination of the agricultural schedules for the Charleston area in 1850 and 1860 provides evidence for this economic slump. Scardaville (in Brockington et al. 1985:39-40) notes that produce, farm, and livestock values for Christ Church Parish were below what would be expected and outputs of many crops had decreased over time. But most significantly, rice was no longer an economically significant crop, production dropping by over 81% from 1850 to 1860.

The Charleston area response to the reduction in rice was a shift to ranching and livestock production as a substitute. Between 1850 and 1860 the value of livestock increased by 120%, corn increased by 44%, wool production increased by 126%, and the value of animals slaughtered increased from $0 to over $5,000 (Scardaville in Brockington et al. 1985:41).

While the fortifications and numerous battles fought around John's, James, and Folly islands during the Civil War are well known, the other defenses of Charleston are perhaps less understood. One author has suggested that, "it is doubtful if any city in the Confederacy had more or stronger defenses than those around Charleston" (Burton 1970:132). In Christ Church parish, about five miles north of Mount Pleasant, the Confederate forces built a line running from the headwaters of the Wando River to the Atlantic Ocean marshes.

It wasn't until 1865, at the very end of the war, that this line was "tested." A Union assault on Bull's Bay was begun on February 13, although weather, poor planning, and shallow water prevented a landing until February 17, when the troops were put ashore at Graham's Creek near Buck Hall Plantation, several miles northeast of the line. It was that same day that Confederate forces retreated from Charleston and the assault on Bull's Bay accomplished little other preventing the Confederate troops from marching north to Georgetown (Burton 1970:316).

After the Civil War Charleston and the surrounding countryside lay in waste. Plantation houses were destroyed, the city was in near ruins, the agricultural base of slavery was destroyed, and the economic system was in chaos. Rebuilding after the war involved two primary tasks: forging a new relationship between white land owners and black freedmen, and creating a new economic order through credit merchants.

In terms of relative importance, cotton and livestock were the two most important agricultural activities in Berkeley County, followed by truck farming and grain production. During the early postbellum period there is also evidence of some land consolidation -- the four tracts in excess of 1,000 acres in 1870 had increased to 151 tracts by 1880. Probably caused by high property taxes, foreclosures, and low selling prices this trend continued only for a decade (Scardaville in Brockington et al. 1985:57). During the late postbellum tenancy increased dramatically throughout South Carolina, except for several coastal areas where Scardaville suggests black farmers were able to purchase small tracts. Where tenancy did exist, it was largely cash rental, not sharecropping, and Scardaville argues that this formed the vital link allowing black ownership (Scardaville in Brockington et al. 1985:62).

Beginning shortly after the Civil War, truck farming became one of the primary agricultural activities of area farmers. The combination of soil fertility, climate, and proximity gave truck farming an edge in the effort to supply Charleston with produce. As a result many blacks were employed as wage laborers. Produce

increased from about one-quarter of the county's agricultural production in 1890 to over three-quarters by 1930 (Scardaville in Brockington et al. 1985:74). Much of this prosperity, however, disappeared during the Great Depression, when trucking in the area declined by 75%.

Historical Research Specific to the Project Tract

The historical research for this project was conducted at the Berkeley County Register of Mesne Conveyance, the Berkeley County Probate Court, the Charleston Public Library, the Charleston County Register of Mesne Conveyance, and the South Carolina Historical Society. As with all projects in Berkeley County it was necessary to incorporate considerable logistical manuvering between both Berkeley and Charleston counties. In addition, it was found that, like so many other properties in this portion of South Carolina, ownership was confused and plats were scarse or absent. This study offered the best, most thorough, reconstruction possible at this stage of investigations. It is possible that additional historical research can fill in some of the gaps, although it is clear that the plantation comprising the study tract will evidence relatively few historical records.

The research of Henery A.M. Smith recounts the early history of the survey vicinity, noting that a tract of 4423 acres which includes the project area was granted to Sir Peter Colleton on September 6, 1679 (Smith 1988:20). Located south of and adjacent to the Fairlawn Barony, the property was sold in 1708 to Col. Thomas Broughton. It seems unlikely, given that Colleton's known settlements were on the northern portion of Fairlawn Barony (see Smith 1988:23), that any substantial development took place on the tract during his ownership. In spite of this, the deed to Broughton reveals that the 4423 acre tract "is now called or known by the name of the Mulberry Plantation."

Thomas Broughton was an individual with considerable political aspirations. He served as a member of the Governor's Concil from 1704-1710, Controller and Collector of Customs in 1708, Surveyor General of South Carolina in 1709, served in the Yemassee War of 1715, was a member of the Council in 1717 and an Assistant to the Judge of Admiralty responsible for trying pirates, served on the Commission to Regulate Indian Trade from 1718-1719, was Speaker of the Assembly from 1725-1727, and was Lieutent Governor from 1731-1735. While remembered for being instrumental in having Indian trader Thomas Nairne imprisoned on trumped-up treason charges, he is perhaps best known for bringing South Carolina to the brink of Civil War. After Governor Nathaniel Johnson's successor, Col. Edward Tynte, seven months after assuming leadership of the colony a dispute arose between the two contenders -- Broughton and Robert Gibbes. Although Broughton eventually served as interim governor from 1735 through 1737, it was not until armed factions supporting both candidates threatened violence (South Carolina Historical Society, Broughton Family Folders, 30-4).

Broughton developed his main plantation settlement on the Cooper River, bounded by tidal rice lands. Through an accident or miscommunication, the settlement was built on lands he did not own, resulting in a land swap with Colleton whereby Broughton obtained 300 acres of river front in exchange for 300 acres of pinelands and an additional payment of £ 150 Sterling to Colleton (Smith 1988:22-23).

In 1723, Thomas Broughton and his wife, Anne, sold 927 acres of the plantation, later to become known as Crawl Plantation, to John Gibbes (Charleston County RMC, DB H, p. 115). The remainder of Mulberry apparently remained more or less intact as it was devised from Thomas Broughton to his son, Nathaniel in 1737. It seems to have been split into several smaller tracts after this time. At Nathaniel Broughton's death in 1754 a portion of the property passed to his elder son, Nathaniel, while another portion, known as Seaton, was passed to his younger son, Andrew (South Carolina Historical Society 11/93/22). Eventually the property became split into four or five different tracts (North and South Mulberry, Seaton, Exeter, and Kibblesworth), all owned by various Broughtons -- evidencing the effects of inheretance on land ownership patterns during the late eighteenth and early nineteenth centuries.

The period from 1723 into the first quarter of the ninteenth century is poorly understood. This is regretable, since it was during this period that the study tract became intensively occuppied and used. It is particularly disheartening that no early plats have been identified for the tract (although a number have been found for adjacent parcels). The available research suggests that Gibbes passed the property to Ann Middleton (a 1792 plat indicates that the tract was still known as Crawl and was owned by the heirs of Ann Middleton) (McCrady Plat 4259). Mary Middleton (presumably the heir of Ann Middleton) sold the 836 acre Crawl Plantation, which encompasses the study area, to Dr. Hayhem Haig in February 1814 (Charleston County RMC, DB P-10, p. 64). The tract was bounded to the north by lands of William Mitchel, southwest by lands of the heirs of Sir John Colleton, south by lands owned by heirs of John Broughton, and east by the heirs of Col. Isaac Motte. After this date the plantation is consistently known as Oakley. A plat of the tract to the north of Oakley, dated 1827, shows that the plantation was still owned by "Dr. Haig" (Charleston County RMC, DB A-10, p.22a).

Haig's ownership of the plantation is not well understood, although by 1833 the executors of Mary Middleton's estate, Henry Middleton and John Izard Middleton, had obtained a $4,180 judgement against Haig, for an unpaid bond held by Mary Middleton at her death. The judgement was assigned to Mary Motte, the wife of Dr. Haig, apparently saving the property from sale (Charleston County RMC, DB P-10, p. 32). The repreive, however, was shortlived.

By 1844 a deed for Kibblesworth Plantation, immeidately south of Oakley, noted that the northern boundary was on "land of Mr. Dawson, formerly of Dr. H.M. Haig" (Charleston County RMC, DB P-11, p. 62). Only a few years latter, in 1858, the Oakley Plantation (now encompassing about 900 acres), was sold by the sherriff to Nathan H. Guyton (Charleston County RMC, DB W-13, p. 441). The deed revealed that in 1856 a judgement was obtained against the estate of Stading (?) Dangerfield (administered by John R. Dangerfield). The tract was described in the 1858 deed as bounded to the north by S.W. Barker, to the east by the Moncks Corner Road, to the south by the lands of Samuel Lynes, and to the west by lands of Motte.

After the Civil War the plantation was conveyed by Nathan H. Guyton to J.J. Browning, as trustee for his wife, Elizabeth Harriett Guyton. Apparently the 1865 conveyance was intended to protect the property from creditors and assure that his wife would have a constant source of income. The tract, still described as containing 900 acres, was bounded on the north by lands of S.W. Barker and Thomas Hitzer (?), to the east by the Moncks Corner Road, on the south by lands of the estate of Samuel Lynes (known as Kibblesworth Plantation, still maintaining the name given it by Alexander Broughton in the eighteenth century) and to the west by lands of J.R. Molley (?). Guyton stipulated that he would continue to have "free use and control" of the lands for planting and other plantation activities (Charleston County RMC, DB A-14 #5, p. 432).

At the death of J.J. Browning, about 1885, Nathan appointed a new trustee, W.G. Guyton. A series of transactions in the late 1880s suggest that Guyton was endeavoring to sell the plantation. In 1887 35 acres of Oakley Plantation were sold to July Pyatt (Berkeley County RMC, DB A-8, p. 3). Additional tracts were sold to Susan Morgan (in 1891), Peter Simons (in 1891), and Ned Weymon (in 1892). This pattern of disposal suggests that Guyton was selling tracts to freedmen -- perhaps previously slaves on his land or perhaps simply those able to afford their own property. No will could be found for Nathan Guyton, although his wife, Elizabeth H. Guyton, died testate in 1898. She was still living at Oakley, although the inventory of her estate makes it clear that she had, at best, a life estate in the plantation (Berkeley County Probate Court, Will Box 20, Packet 16).

While a clear chain of title could not be established, it seems likely that the Oakley Plantation not previously sold was divided among Nathan's children: W.G. Guyton, Anne M. Skinner, H.W. Guyton, S.D. Guyton, Arthur F. Guyton, J.V. Guyton, and George N. Guyton. In 1904 Arthur F. Guyton was granted the parcel of 15 acres of Oakley on which he had built a "store." The deed notes that the acreage would be deducted from Arthur's share when the estate (presumably the estate of his father, Nathan) was settled (Berkeley County RMC, DB C-9, p. 6).

A series of deeds track the division of the estate, with the various children selling interests in various tracts. Unfortunately the plat which would help place all of these tracts in relationship to each other cannot be located (see for example Berkeley County RMC, DB A-46, p. 278). Regardless, the division apparently resulted with George N. Guyton possessing a tract of about 680 acres by 1910, as evidenced by a plat of the property surveyed for the Sea Coast Timber Company (Berkeley County RMC, PB A, p.132; Figure 2). This property includes the southern portion of the study tract (incorporating the plantation remains identified as 38BK1669 and 38BK1670). George Guyton died in January 1927, at which time he owned 180 acres (Berkeley County Probate Court, Will Book 49, Packet 22). The only evidence identified concerning his activities are the 10 head of cows which were included in the inventory of the estate.

The heirs of George N. Guyton (Annie M. Skinner, H.W. Guyton, S.D. Guyton, and A.F. Guyton) sold 123 acres to Dr. William Kershaw Fishburne in 1940 (Berkeley County RMC, DB A-67, p. 70). Fishburne also acquired an additional 128 acres from Arthur F. Guyton the same year (Berkeley County RMC, DB A-67, p. 69) and 108 acres from Annie M. Skinner in 1945 (Berkeley County RMC, DB A-75, p. 132). Over a period of several years Fishburne managed to reunite much of the original Oakley Plantation (shown on a 1959 plat recorded in Berkeley County RMC, PB L, p. 187; Figure 3).

Fishburne was born in Walterboro in 1880, a generation too late to have participated in the grandeur of plantation society. He was educated at Porter Military Academy and took a degree from the Medical College of South Carolina. He set up private practice in Pinoplis, marying Anne Sinkler7, and going on to work for a number of civic improvements in Berkeley County, including the public library, the hospital, and a modern health department (South Carolina Historical Society, Fishburne Family Folder, 30-4).

Fishburne died in 1968 and his will devised a life interest in the property to his wife, Anne Wharton Sinkler Fishburne, with the property to eventually be diveided between his daughters, Emily Fishburne Whaley and Anne Fishburne Ball (Berkeley County RMC, Probate Court, Will Box 121, Package 76). The property included 459 acres and two buildings with a total appraised value of $137,700. The inventory and appraisement of the estate revealed a $400 tobacco allotment and the presence of a number of tenants.

In August 1971 the heirs of Fishburne sold the 486.8 acre Oakley Plantation to Ware Brothers Investment Company (Berkeley County RMC, DB A-228, p. 85). Less than a year later Ware Brothers sold a two-thirds interest in the tract to William J. Iselin, Clyde D. Umphlett, Calhoune W. Umphlett (who apparently were the partners of the company) (Berkeley County RMC, DB A-238, p. 115). The survey property was eventually consolidated under the ownership of Clyde D. Umphlett (see Berkeley County RMC, DB A-386, p. 25; DB A-355, p. 54, DB A-355, p. 55).

As a result of this research, a generalized chain of title of title has been assembled for the study tract. Originally part of Sir Peter Colleton's 4423 acre Mulberry Plantation, the property was likley not intensively used at least until Thomas Broughton's ownership beginning in 1708. In 1723 the tract was sold to John Gibbes and it stayed under Gibbes or Middleton ownership until 1814, a period of 91 years. During this period the property was known as Crawl Plantation, not being called Oakley until after the property was sold to Dr. H.H. Haig. It is likely that during this period that the plantation was gradually developed. The period from the first decade of the nineteenth century through about 1850, unfortunately, is poorly understood. There is evidence that the tract was owned by Dr. H.M. Haig, a "Mr. Dawson," and Stading Dangerfield. By 1858 the property was acquired by Nathan Guyton, who maintained the plantation through the Civil War. Oakley remained in the Guyton family until 1940 when it was sold to W.K. Fishburne, who conducted a relatively extensive tenant farming operation at the plantation encorporating at least tobacco farming, probably with cotton planting. By 1971 the property had passed to investors.

It seems unnecessary to stipulate that additional historical research could be profitable, given the numerous, and quite glaring, gaps in our current understanding. For example, future research, clearly, could concentrate on the first half of the nineteenth century in the hope of documenting ownership and plantation

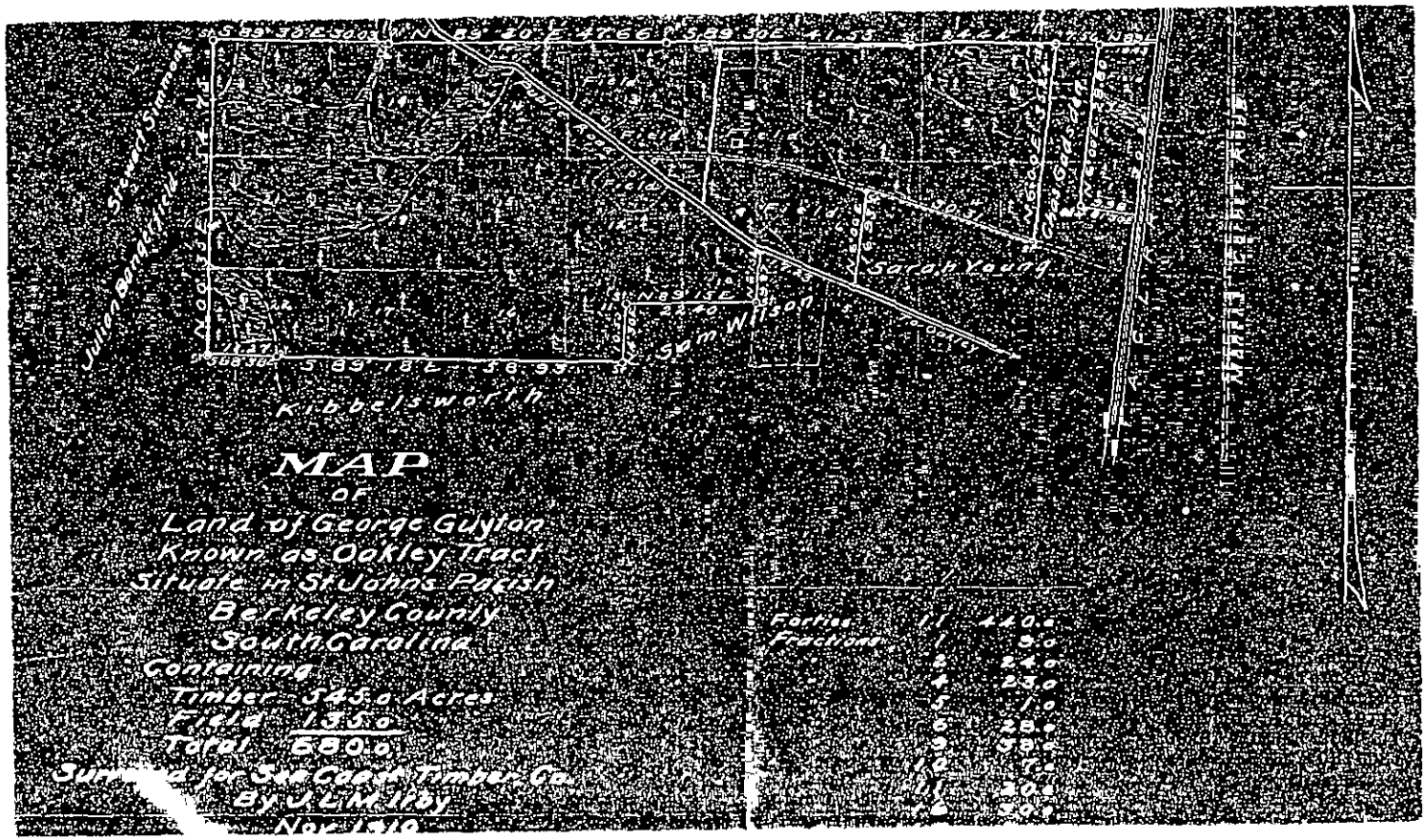

Figure 2. 1910 plat of land purchased by Sea Coast Timber Company.

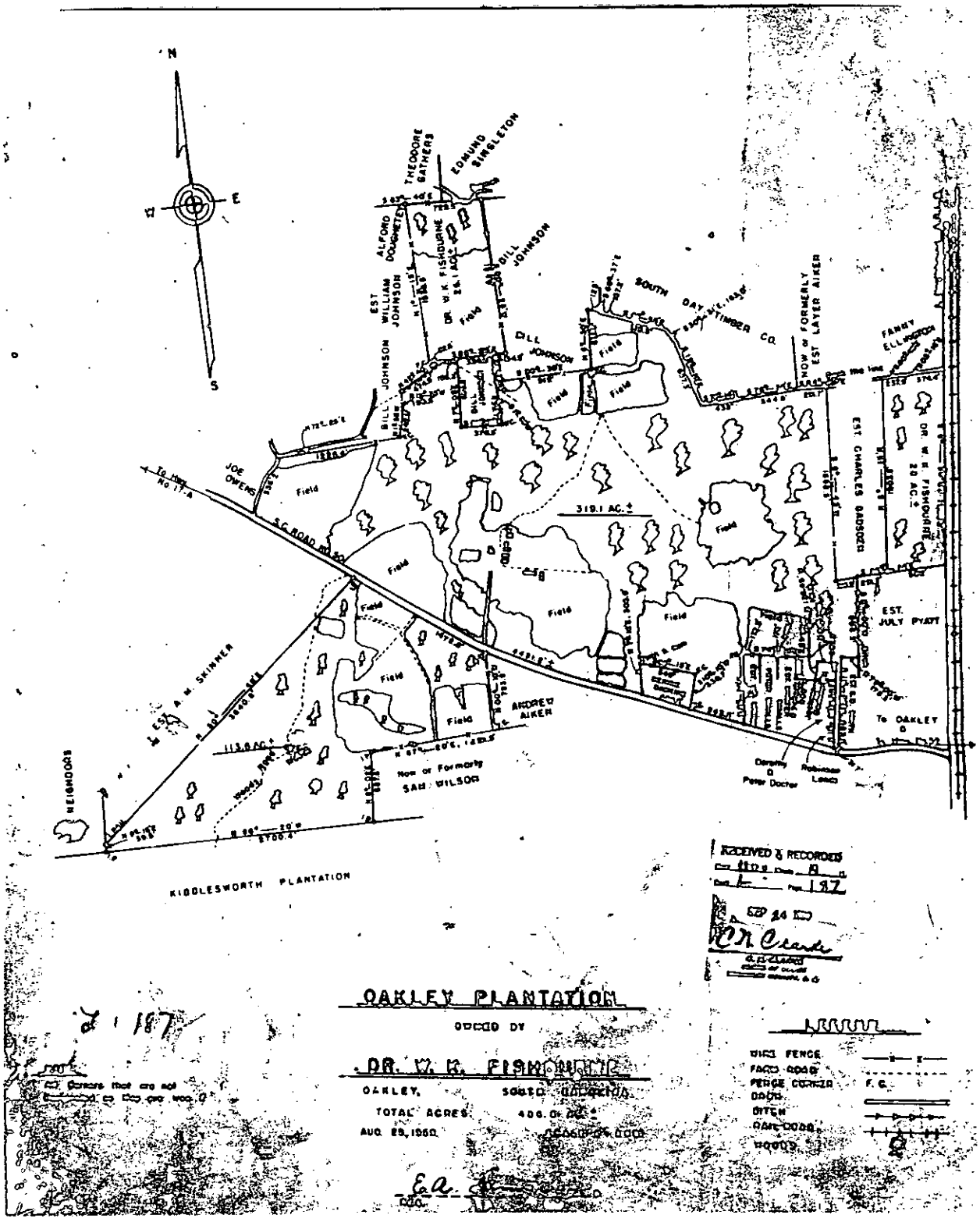

Figure 3. 1959 plat of Oakley Plantation.

activities prior to the Civil War. Just as reasonably, the eighteenth century owernship of the Broughtons deserves more careful attention, both to more fully understand plantation activities during this formative period as well as to document the various family owners. Finally, after the Civil War it seems likely that plantation activities continued using freedmen and this transition from slavery to the use of free operatives is worthy of more careful investigation. Additional historical investigations may also be able to assist in our understanding of how settlement locations changed through time, perhaps in response to the changing ownership and boundaries.

FIELD AND LABATORY METHODS

The initially proposed field techniques involved the placement of shovel tests in high probability areas at 100 foot intervals in transects 100 feet apart. Plowed fields with good surface visibility were subject to pedestrian survey at 100 foot intervals with occasional shovel tests to verify soil conditions. High probability areas included the approximately 10 acre area adjacent to Molly Branch as well as the well drained knoll located in the south central portion of the tract. Moderate and low probability areas (areas away from Molly Branch and areas containing poorly drained soils) would be examined with shovel tests at 200 foot intervals in transects 200 feet apart. As a check on our definition of moderate and low probability areas, several areas were shovel tested or pedestrian surveyed using high probability field techniques. These locations included several areas of somewhat poorly drained Lenoir and Lynchburg soils, poorly drained Rains soils, and moderately well drained Goldsboro soils located away from the swamp edge. These field methods were executed with one deviation. A drainage in the extreme eastern portion of the tract containing poorly drained Meggett loam was examined only through verification of soil conditions and topography because the area contained nearly impenetrable briers. This area (approximately ten acres in size) consistently exhibited reduced, weepy soils and several areas were found standing in water. A total of 36 shovel test transects were used with a total of 192 shovel tests. In addition, approximately 50 acres of high probability fallow field was pedestrian surveyed on transects of 100 feet or closer. Also, moderate probability fallow fields in other portions of the tract were pedestrian surveyed at 100 foot intervals in addition to 200 foot shovel test transects (Figure 4).

The minimal definition of a site in this study was two or more artifacts within a 25 foot area. Should sites be identified by surface collection and/or shovel testing, further tests would be used if possible to help obtain additional data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. A metal detector was also used primarily to better understand site boundaries when additional information was desired. The information required for completion of the South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigator.

At 38BK1669 and 38BK1670, the sites were auger tested on a 20 foot grid. The goal was not to determine site boundaries since that had been accomplished during the reconnaissance, but to better understand artifact densities and possible structural locations. The vast majority of 38BK1669 was tested in this fashion and included 117 auger tests. Time constraints only allowed approximately 40% of 38BK1670 to be examined with 176 auger tests.

All soil from the shovel tests would be screened through ¼-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1 foot or until subsoil was identified. All cultural remains would be collected, except for shell, mortar, and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered and soil colors would be designated with a Munsell soil color chart.

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories on January 24 and 25, 1994. These materials are being catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology. Original and duplicate field notes, as well as photographic materials, have been prepared for curation using archival standards and will be transferred to the South Carolina Institute of Archaeology and Anthropology as soon as the project is complete. Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

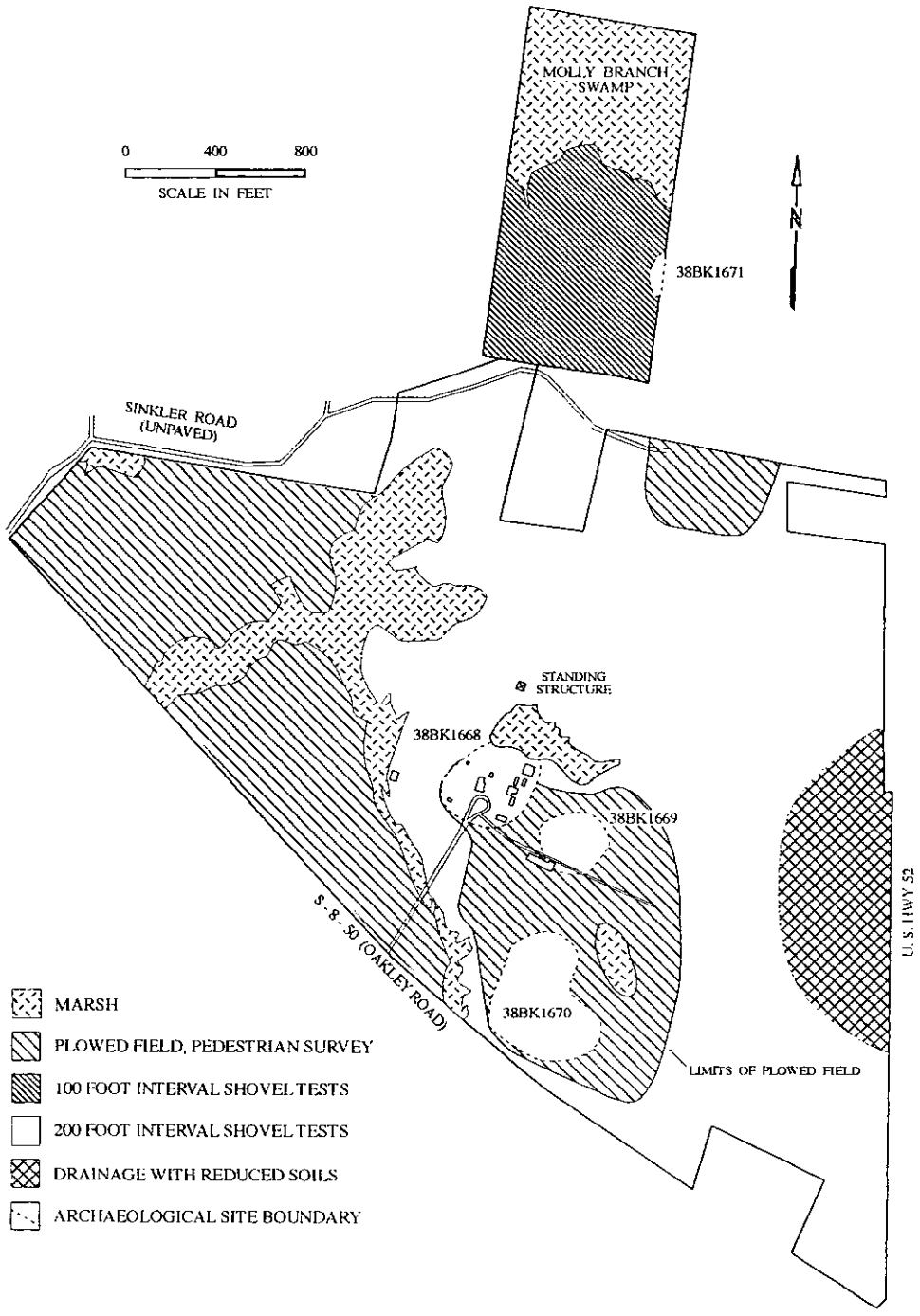

Figure 4. Areas of pedestrian survey, shovel test survey and sites.

SURVEY RESULTS AND IDENTIFIED SITES

As a result of the intensive of the Berkeley County landfill extension tract four previously identified sites and one standing structure was revisited. No new sites were recorded.

Archaeological Sites

38BK1668 is located at the end of a dirt road running perpendicular to S-8-50, about 900 feet north of S-8-50. It consists of a complex of buildings which include a farmhouse and 11 additional structures or structure ruins. The complex was recorded on a South Carolina Statewide Survey Form in 1989 by Preservation Consultants, Inc. as U/19/0000/339 0034.

The survey form describes the farm house as a two story frame structure with a gabled roof and two internal brick chimneys. A central stair hall is flanked by parlors and bedroom on each level. According to the survey form, Preservation Consultants, Inc. believed that the house dates to circa 1858 based on a statement by Elias Bull. They indicate that "Bull states that this house was constructed 1858c for Nathan Guyton, a planter;...", and they reference "Historic Preservation Inventory, Berkeley County" 1979, p. 25. This citation is an unfamiliar one and is not referenced in their final report (Preservation Consultants, Inc. 1990). This final report does cite Bull (1972), however, this reference does not contain the information they included in the survey form. Therefore, the source for the 1858 date is unknown.

Surface visibility was good in the dirt road and immediately west of the farmhouse and a collection was made. In addition to the surface collection 11 shovel tests were excavated at 50 foot intervals in cardinal directions from the farmhouse. Of those 11 tests, three (or 27.3%) were positive. The artifacts recovered from the surface and shovel tests are presented in Table 1.

Whitewares have a mean date of 1895 (Bartovics 1981) and have a very long span of manufacture from 1820 (South 1977) to the present. Based on the archaeological remains as well as a cursory examination of the standing architecture, it seems unlikely that the complex dates to the mid-nineteenth century. The complex appears to date to the first quarter of the twentieth century and appears to be a folk Victorian-style house (Figure 5).

Table 1.
Artifacts Collected from 38BK1668

	Surface	50E	100E	50W
Undecorated Whiteware	7			
Underglazed Porcelain	1			
Bristol Slip Stoneware				1
Amber Bottle Glass				1
Agate doorknob	1			
Window Glass				2
UID Nail Fragments		3	1	
Total	9	3	1	4

Figure 5. North view of main house associated with 38BK1668.

The site measures approximately 400 by 400 feet, based on a combination of standing or ruined structures and archaeological remains. In addition to this 400 foot core, two outlying field buildings flank the site. One is located about 200 feet east of the complex and the other is located about 300 feet west of the complex. The soils are classified as well drained Caroline fine sandy loam and the central UTM coordinates are E589860 N3666070.

Since the reconnaissance survey in September 1993, several of the outbuildings have further collapsed and the house appears to be rapidly approaching failure. Preservation Consultants, Inc. (1990) suggested that the house has undergone a number of alterations which has compromised the structure's integrity. If the structure does indeed date to c. 1858 then clearly its integrity has been compromised. However, the sparse archaeological aspect of the site suggests that the structure probably dates to the twentieth century.

38BK1668 is recommended as not eligible for inclusion on the National Register. It is likely that the architectural integrity of the house has been greatly compromised and the archaeological remains do not appear to well represent the mid to late 19th century occupation of the house. The archaeological component is not a good candidate for addressing significant research questions relating to the postbellum and early twentieth century. It can not address general questions about the effects of reconstruction on the elite planter class, since not only is the 1858 date of construction questionable, but the archaeological component is sparse and does not exhibit a wide variety of data sets.

38BK1669 is located on a small knoll approximately 1000 feet north of S-8-50 and 400 feet east of 38BK1668. It consists of a scatter of eighteenth and nineteenth century historic artifact in a 300 by 300 foot

area of a cultivated field. During the reconnaissance study, 21 shovel tests were placed in the site area to determine these boundaries. Surface visibility was good and a collection was made. In addition, the site was auger tested on a 20 foot grid oriented with the plowed field (N20°E) to better understand site density and building locations rather than site boundaries since they had been determined previously during the reconnaissance (Adams 1993). The grid measured 160 feet north- south by 240 feet east-west. A total of 117 tests were excavated. Of these tests, 36 (or 30.8%) yielded artifacts (Table 2). The majority of these remains are concentrated in the southeastern portion of the grid (Figure 6). Although the density map indicates that the site extends further south outside of the auger grid, pedestrian survey and metal detection just south of the wind row indicated that artifacts dropped off significantly. Also, the landform falls off sharply in this

Table 2.
Summary of artifacts from 38BK1669

Provenience	E	Col.	BG	Kit	WG	N	B	PS	PB	Act	Total
Surface	71	4	11		7			2	1		96
AT3					1						1
AT4			1	1							2
AT7	2										2
AT8			2								2
AT9			3								3
AT10	1				2	4					7
AT11						1					1
AT13	1										1
AT14			1								1
AT20	1										1
AT21						1					1
AT22					1	1					2
AT23	2					1				1	4
AT32						1					1
AT34						2					2
AT42			1								1
AT44					1						1
AT45			1								1
AT46					1						1
AT47	1										1
AT49						1					1
AT50	1										1
AT59	1										1
AT71			1								1
AT73			1								1
AT75	1										1
AT96			1								1
AT100							1				1
AT107	1										1
AT108						1					1
AT109	1										1
AT112			1		1	1					3
AT113										1	1
AT114			2		2	4					8
AT115	1					5					6
AT117	1		1								2
Total	86	4	27	1	16	23	1	2	1	2	163

Key: E=European ceramics; Col.=Colonoware; BG=bottle glass; Kit=Kitchen; WG=window glass; N=nails; B=buttons; PS=pipe stem;; PB= pipe bowls; Act=activities artifacts.

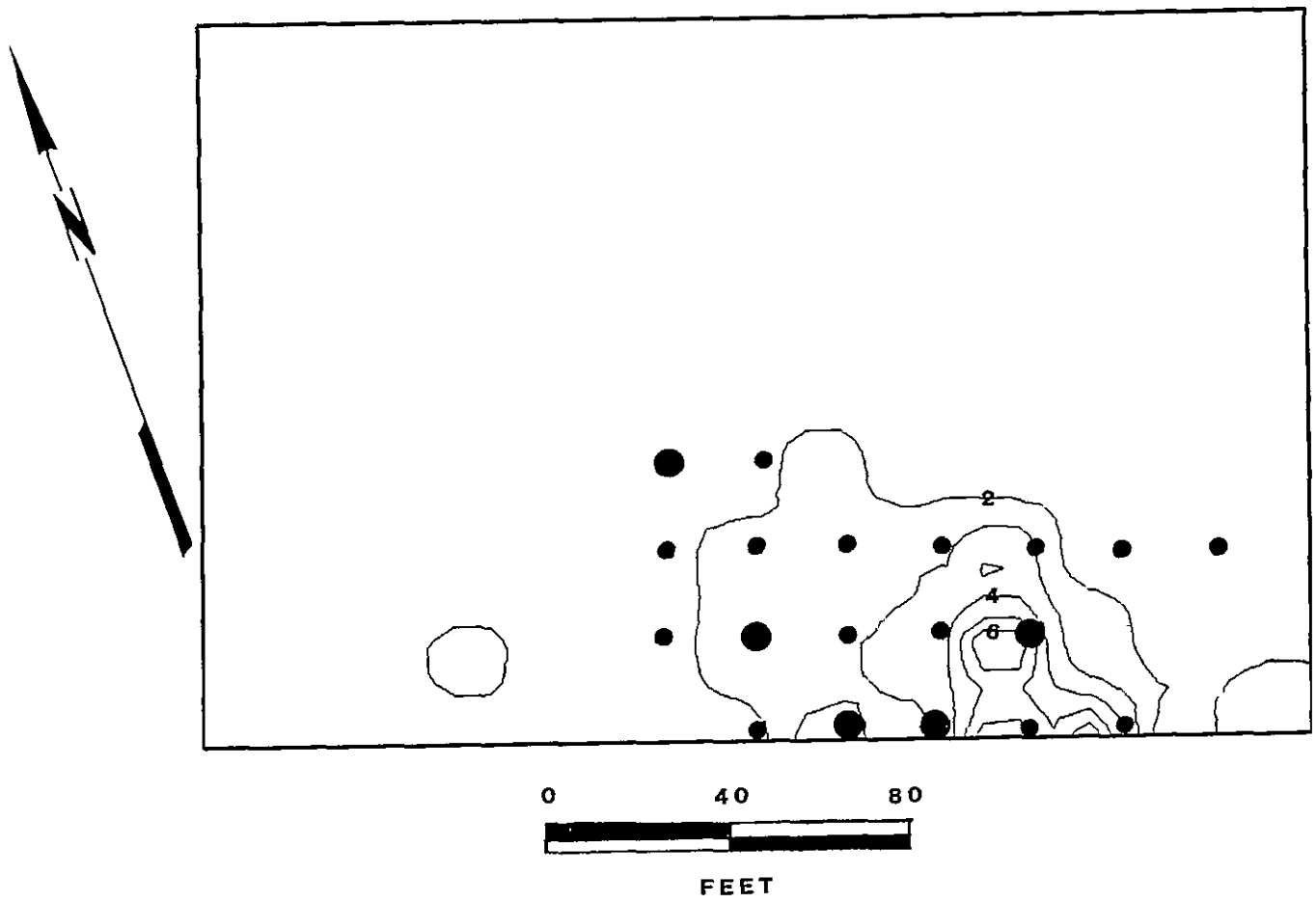

Figure 6. Artifact density map of auger tests at 38BK1669.

area. Soil profiles revealed 0.9 to 1.1 feet of dark grayish brown (10YR4/2) plowzone overlying yellowish brown (10YR5/4) subsoil. In some areas the profile consists of 0.9 feet of plowzone overlying about 0.4 feet of plowed moderate brick rubble. Underneath the rubble is subsoil.

In addition to the artifacts listed above, several specimens of plaster were encountered. One of these was collected. European ceramics consisted of the majority (95.5%) of the ceramic assemblage. Of these ceramics, 80 were datable. The mean ceramic date for the site is 1797.9 (Table 3). A probability contribution for historic ceramics was calculate to determine length and intensity of use. This formula, advocated by Bartovics (1981), is expressed:

$$Pj/yr. = \frac{fj}{F \times Dj}$$

where Pj = partial probability contribution
fj = number of sherds in type j
F = number of sherds in sample
Dj = duration in range of years

Based on these calculations, 38BK1669 appears to have been first occupied around 1765 and abandoned about 1830. The most intense period of occupation was between 1780 and 1830. The 163 artifacts were categorized using South's (1977) artifact patterning technique. Since the site was extensively surface collected, which tends to discriminate against the collection of architectural materials such as nails, a pattern for auger tests was constructed as well as an overall pattern. These patterns are presented in Table 4.

The artifact pattern achieved from the auger tests does not fall within the range of any published pattern (Table 5). However, this may be due to small sample size. Previous work by South (see South 1977) on 18th century sites suggests that the kitchen group is generally higher than the architecture group, which he termed the Carolina artifact pattern. However, recent research on Kiawah Island plantation main houses (see Trinkley 1994) indicates a much more inflated architecture group percentage representing over 80% of the collections. These plantations were constructed near the turn of the century and may represent a 19th century main house pattern rather than South's Carolina artifact pattern obtained from 18th century sites. It is more likely, however, that these inflated architecture percentages are related to the placement of excavation units either within or immediately adjacent to the main houses (for further discussion, see Joseph 1989).

A combination of surface materials, auger testing, and metal detection indicated that the site measures approximately 200 feet north-south by 240 feet east-west. The soils are well drained Caroline fine sandy loam and the central UTM coordinates are E590040 N3666000. Based on the presents of a zone of brick rubble, it is likely that the site may exhibit intact cultural features, allowing it to address a wide variety of significant research questions surrounding eighteenth and nineteenth century settlement in this portion of Berkeley County.

These research questions could include:

- How does the artifact assemblage of this rather obscure plantation compare to other Goose Creek area plantations, such as Crowfield and Broomhall, which were historically well known as the exception rather than the rule? The site has exhibited a relatively wide range of artifacts, indicating that this question can be approached.

- How do the architectural features at 38BK1669 compare to other excavated Charleston area plantations? Is the house simply constructed or is the house more ornately designed? The plowzone at 38BK1669 did not extend more than 0.9 feet suggesting that architectural features should still be intact. In fact, other excavated plantations such as Lesesne (Zierden

Table 3.
Mean Ceramic Date for 38BK1669

Ceramic	Mean Date (xi)	(fi)	fi x xi
Underglz. blue porcelain	1730	8	13840
Westerwald	1738	6	10428
White salt glazed stoneware	1758	1	1758
Lead glazed slipware	1733	1	1733
Clouded wares	1755	1	1755
Decorated delft	1750	1	1750
Plain delft	1720	2	3440
Creamware,			
annular	1798	3	5394
undecorated	1791	10	17910
Pearlware			
poly hand painted	1805	2	3610
edged	1805	4	7220
annular	1805	2	3610
undecorated	1805	20	36100
Whiteware			
blue trans printed	1848	6	11088
annular	1866	3	5598
undecorated	1860	10	18600
Total		80	143834

MCD = 143834 ÷ 80 = 1797.9

Table 4.
Artifact patterns at 38CH1669

Group	Overall #	Overall %	Auger Tests #	Auger Tests %
Kitchen	118	72.4	32	47.8
Architecture	39	23.9	32	47.8
Furniture	--	--	--	--
Arms	--	--	--	--
Tobacco	3	1.8	--	--
Clothing	1	0.6	1	1.5
Personal	--	--	--	--
Activities	2	1.3	2	2.9
Total	163	100.0	67	100.0

Table 5.
Comparison of published artifact patterns

Artifact Group	Revised Carolina Artifact Pattern[a]	Revised Frontier Artifact Pattern[a]	Carolina Slave Artifact Pattern[a]	Georgia Slave Artifact Pattern[b]	Piedmont Tenant/ Yeoman Artifact Pattern[c]
Kitchen	51.8 - 65.0%	35.5 - 43.8%	70.9 - 84.2%	20.0 - 25.0%	45.6% (40.0 - 61.2%)
Architectural	25.2 - 31.4%	41.6 - 43.0%	11.8 - 24.8%	67.9 - 73.2%	50.0% (35.8 - 56.3%)
Furniture	0.2 - 0.6%	0.1 - 1.3%	0.1%	0.0 - 0.1%	0.4%
Arms	0.1 - 0.3%	1.4 - 8.9%	0.1 - 0.3%	0.0 - 0.2%	-
Clothing	0.6 - 5.4%	0.3 - 1.6%	0.3 - 0.8%	0.3 - 1.7%	1.8%
Personal	0.2 -0.5%	0.1%	0.1%	0.1 - 0.2%	0.4%
Tobacco	1.9 - 13.9%	1.3 - 14.0%	2.4 - 5.4%	0.3 - 9.7%	-
Activities	0.9 - 1.7%	0.5 - 5.4%	0.2 - 0.9%	0.2 - 0.4%	1.8%

Sources:
[a] Garrow 1992
[b] Singleton 1980
[c] Drucker et al. 1984:5-47 (no range was provided, but has been partially reconstructed for the Kitchen and Architecture Groups)

et al. 1986), Yaughan and Curriboo (Wheaton et al. 1983) which had been damaged by plowing exhibited large numbers of intact features. In addition, the base of the plowzone exhibited a lens of rubble and plaster indicating that features below this zone will still be intact.

- How does the architecture and the layout of the plantation complex reflect current landscape movements? In other words, does the plantation exhibit a Georgian world view? Is there evidence that the plantation was later altered to reflect the late 18th century picturesque landscape movement (see, for example, Brooker and Trinkley 1991)? Is there an initial blending of both landscape types? What does the plantation landscape at 38BK1669 tell us about the view small planters had of their world? This question can be addressed through a combination of locating architectural features houses and outbuildings), archaeological features (fence lines and roads), the relationship of the main house to the slave row, and historic plats.

38BK1669 has the potential to address all of these research questions and can help to better understand plantation diversity and the effects of cultural movements on Goose Creek area small planters. As a result of the site's ability to address these significant research questions, 38BK1669 is recommended as eligible for inclusion on the National Register of Historic Places.

38BK1670 is located 600 feet north of S-8-50 and 500 feet east of the dirt road leading to the farm complex. It consists of a scatter of eighteenth and nineteenth century materials in a cultivated field. Surface visibility was excellent and a collection was made. During the reconnaissance survey (Adams 1993), 20 shovel tests were placed at 25 foot intervals to determine site boundaries. Based on this work, the site was believed to measure 300 feet east-west by 600 feet north-south. Since the reconnaissance, the site (which previously stood in a harvested corn field) had been turned under which provided excellent surface visibility. An extensive surface collection was made and 176 auger tests were excavated in the northern portion of the site. In addition, site boundaries were checked using a metal detector. The surface collection and metal detecting indicated that the site is larger than previously believed. The site measures 300 feet east-west on the northern end, but bulges east for an additional 250 feet at the southern end. The site remains approximately 600 feet north-south. In other words, instead of being linear, the site is L- shaped following a landform.

The auger test grid was laid out N20°E with a 20 foot interval. The grid measured 200 feet east-west by 300 feet north-south. Of the 176 auger tests, 56 (or 31.8%) were positive. The density map produced (Figure 7) shows a somewhat irregular scatter of artifacts. Some of the concentrations may indicate structure locations although the results were unclear. However, there is one distinct concentration in the central portion of the grid.

Surface collecting at the site yielded very high quantities of colonoware. Other major artifact types included black bottle glass and pipestems. A somewhat different profile was observed in the southern portion of the site and a separate collection was made from this area. European ceramics seemed to account for a larger percentage of the ceramics collected. Table 6 provides a summary of the artifacts from the surface collections and the auger tests.

In addition to the historic artifacts, several prehistoric items were recovered. These include three Coastal Plain chert flakes, one Coastal Plain chert stemmed projectile point haft, one Coastal Plain chert Thelma projectile point, three small unidentifiable sherds, two Irene Complicated Stamped sherds, and one unidentifiable Net Impress sherd. The Thelma South 1959) point is 31.2 mm long. The blade is 27.0 mm long, about 23.2 mm wide, and 8.7 mm thick. The haft is 8.9 mm wide. One of the ears has been snapped.

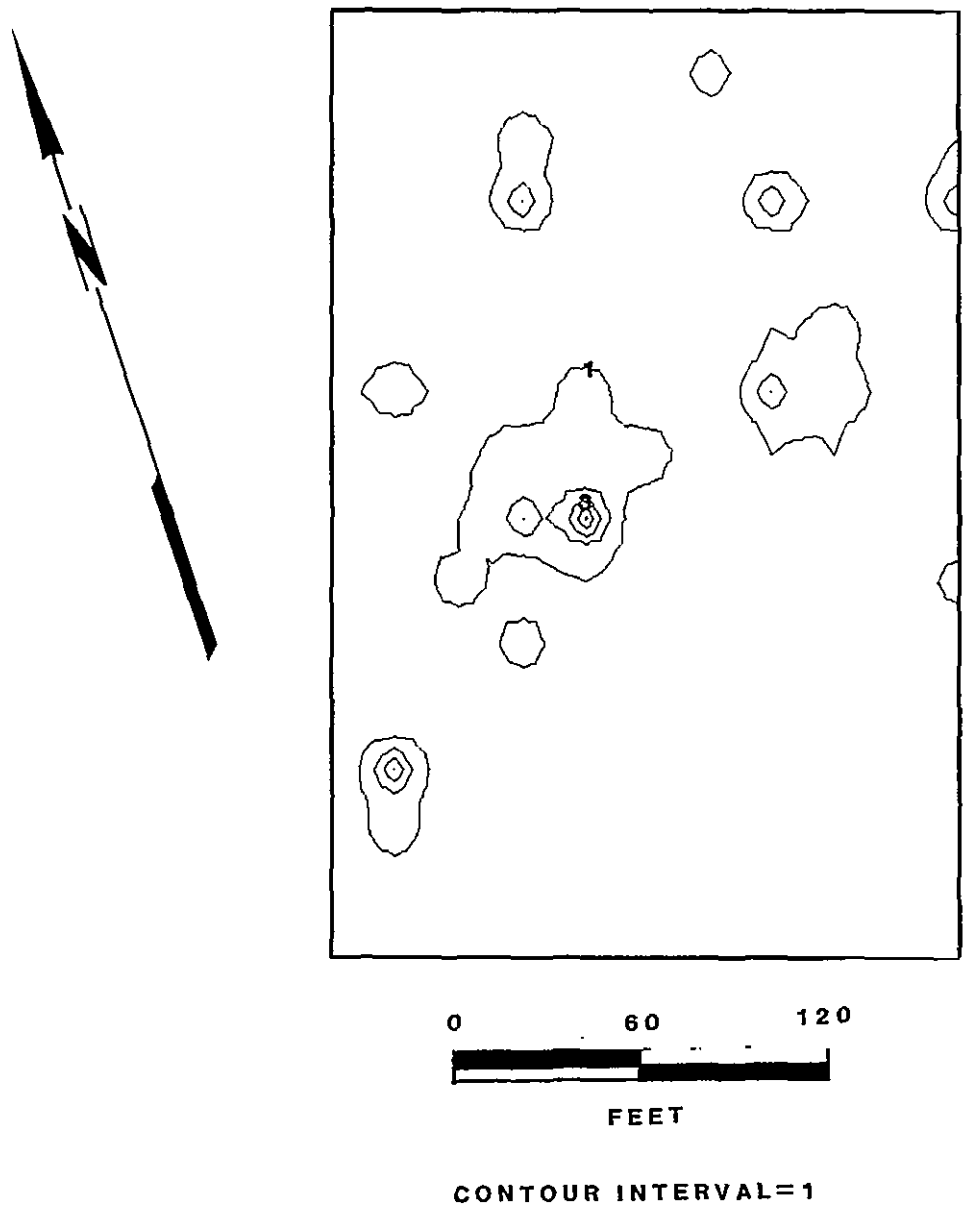

Figure 7. Artifact density at 38BK1670.

Table 6.
Summary of historic artifacts from 38BK1670

Provenience	E	Col.	BG	Klt	WG	N	B	PS	PB	Act	Total
Surface, overall	87	114	52				1	18	3	1	276
Surface, south	29	35	11		2	1		2			80
AT2			1								1
AT12		1									1
AT15			1								1
AT17			1							1	2
AT21			1								1
AT22								1			1
AT25		2									2
AT26			1								1
AT31		1									1
AT32			1								1
AT34		1									1
AT36		1	1								2
AT40		2						1			3
AT41		1									1
AT43		2									2
AT49	1										1
AT58			1								1
AT62		1									1
AT63		2									2
AT66		1									1
AT67			2								2
AT68		1									1
AT70	1	1									2
AT73		3									3
AT74		2									2
AT75	1										1
AT76			1								1
AT79		1									1
AT80		2									2
AT81			1					1			2
AT82		2									2
AT84		1									1
AT85		1									1
AT90			1								1
AT91		3									3
AT92		5									5
AT95			1								1
AT96		1									1
AT101		1									1
AT103		1									1
AT108		1									1
AT110		1	1								2
AT114		1				1					2
AT126		1									1
AT131									1		1
AT134	1	3									4
AT137			1								1
AT145	1	1									2
AT148		1									1
AT152		1									1
AT168			1								1
AT169		1									1
AT173		1									1
AT174			1								1
Total	121	201	81	0	2	2	1	23	4	2	437

Key: E=European ceramics; Col.=Colonoware; BG=bottle glass; Klt=Kitchen; WG=window glass; N=nails; B=buttons; PS=pipe stem; PB= pipe bowls; Act=activities artifacts.

Colonoware ceramics consisted of the majority (60.5%) of the ceramic assemblage. Of the 121 European ceramics, 118 are datable. The mean ceramic date for the site is 1785.6 (Table 7). A probability contribution for historic ceramics was calculate to determine length and intensity of use. The profile is similar to 38BK1669, although the span is slightly earlier which may be a result of time lag reflected in many low status sites. The site appears to have been initially occupied about 1765. The most intense period of occupation was between 1765 and 1820.

As previously indicated, there was a belief that the European ceramic to colonoware ratio was higher in the southern portion of the site suggesting the presence of a higher status individual. This was further fueled by the presence of a light scatter of brick rubble in this area which was absent in the northern portion of thesite. However, after analysis, the percentage of European ceramics in the ceramic assemblage was not significantly different. European ceramics represented 43.3% of the overall collection and 45.3% of the collection from the southern portion.

The 437 artifacts were categorized using South's (1977) artifact patterning technique. Since the site was extensively surface collected, which tends to discriminate against the collection of architectural materials

Table 7.
Mean Ceramic Date for 38BK1670

Ceramic	Mean Date (xi)	(fi)	fi x xi
Underglz. blue porcelain	1730	8	13840
Westerwald	1738	5	8690
White salt glazed stoneware	1758	7	12306
British brown stoneware	1733	4	6932
Lead glazed slipware	1733	6	10398
Clouded wares	1755	1	1755
Decorated delft	1750	2	3500
Plain delft	1720	1	1720
Creamware,			
annular	1798	2	3596
undecorated	1791	31	55521
Pearlware			
mocha	1843	1	1843
poly hand painted	1805	1	1805
blue trans printed	1818	7	12726
edged	1805	12	21660
undecorated	1805	25	45125
Whiteware			
blue trans printed	1848	1	1848
undecorated	1860	4	7440
Total		118	210705

$$MCD = 210705 \div 118 = 1785.6$$

such as nails, a pattern for auger tests was constructed as well as an overall pattern. These patterns are presented in Table 8.

The artifact pattern achieved from the auger tests does not fall with the range of any published artifact pattern (Table 5). The closest is the Carolina Slave pattern. Although the small sample size obtained from the auger tests may have caused one artifact group toappear inflated, it may also suggest that the slave houses were constructed in a manner which required the use of very few manufactured goods such as nails and window glass.

Table 8.

Artifact patterns at 38CH1670

	Overall		Auger Tests	
Group	#	%	#	%
Kitchen	403	92.2	75	92.6
Architecture	4	0.9	1	1.2
Furniture	--	--	--	--
Arms	--	--	--	--
Tobacco	27	6.2	4	5.0
Clothing	1	0.2	--	--
Personal	--	--	--	--
Activities	2	0.5	1	1.2
Total	437	100.0	81	100.0

A combination of surface materials, auger testing, and metal detection indicated that the site measures approximately 600 feet north-south by 300 feet east-west with an "L" extension on the south end extending east for an additional 250 feet. The soils are well drained Caroline fine sandy loam and moderately well drained Goldsboro loamy sand, and the central UTM coordinates are E590020 N3665880. Soil profiles revealed 0.9 to 1.1 feet of dark grayish brown (10YR4/2) plowzone overlying yellowish brown (10YR5/4) subsoil.

Although plowing has damaged the upper 1.0 foot of the site, it is likely that architectural and other features will be found intact under the plowzone. Similar situations have occurred at other Berkeley County slave rows such as Lesesne (Zierden et al. 1986), Yaughan, and Curriboo (Wheaton et al. 1983). A number of relatively large artifacts were recovered from the surface suggesting that plowing has not completely "chewed up" the artifact bearing zone. The sparsity of architectural materials and brick suggest either post construction, post and trench construction, or some other more ephemeral construction. Because of the likelihood of intact features, the site can address a number of significant research question. These questions include:

- How does the artifact assemblage compare with other slave sites and with the assemblage at the plantation main house (38BK1669)? What does it tell us about the similarity or variability found at plantation slave rows? Only a few eighteenth century slave sites have been excavated in South Carolina while a much larger number of nineteenth century slave sites have been examined. Eighteenth century sites associated with slaves are few and scattered. They include Yaughan and Curriboo in Berkeley County (Wheaton et al. 1983), Willbrook Plantation in Georgetown County (Trinkley 1993), Cotton Hope Plantation on Hilton Head Island (Trinkley 1990b), and Wappoo Plantation in Charleston County (Gardner and Poplin 1992). Clearly, more eighteenth century sites need to be examined, at both a statewide level and an intra-regional level.

- How does the architecture compare with what is known archaeologically and historically about eighteenth century Berkeley County slave houses (Wheaton et al. 1983; Zierden et al. 1986; Drucker and Anthony 1979; see Adams 1990 for a synthesis) as well as other areas of the state? Previous research (see Adams 1990) has suggested that historical accounts of slave housing do not coincide with what has been found archaeologically. Although only a few houses have been excavated, more data is needed to better understand diversity and dichotomy between written documents and the archaeological record.

- How does the slave row and the surrounding area fit into the planter's landscape concept? Are houses rigidly aligned or are they unevenly placed? Is there evidence for fences? If yard features are present, what do these features suggest about the use of extramural space by

slaves in the eighteenth and early nineteenth century (see Westmacott 1992; Ferguson 1992; Adams 1990)? Although the landscape concept is not new to the humanities, only recently have archaeologists tried to implement field techniques to begin understanding historic landscapes. In South Carolina, very few plantation sites to date have been excavated with the goal of better understanding the arrangement of structures, work areas, fences, roads, and fields.

- Is there evidence for alienation of the slave population? Some (Terry 1981; Orser 1988) have suggested that this alienation took place in the mid eighteenth century as planters obtained more and more wealth. They then separated themselves physically and materially from their slaves. In other words, although the planter became richer, the slaves' conditions did not improve, increasing the gap between planter and slave. Is there evidence that slaves benefitted from the plantation owner's wealth? Terry's (1981) historical research and economic model of St. John's Parish (including the study area) provides an opportunity to explore the use and display of wealth and its implications for the slave population. Archaeological investigations to identify type of housing and the artifactual assemblage can address these questions as well as historical research to locate wills and inventories.

38BK1670 has the potential to address all of these research questions. As a result of the site's ability to address these significant research questions, 38BK1669 is recommended as eligible for inclusion on the National Register of Historic Places.

38BK1671 is located about 300 feet south of the swamps of Molly Branch in the northernmost portion of the tract on a side slope of somewhat poorly drained Lynchburg soils. It consists of a light scatter of twentieth century remains at the edge of a fallow field. Surface visibility was relatively poor, however a collection was made. Eleven shovel tests were excavated in the site area. Of those 11 tests, six (or 54.5%) contained cultural materials.

Table 9 presents the materials recovered. All but one of the 58 specimens are from the kitchen group, most of which came from shovel test 50S. This test was located in a low area and probably reflects trash dumping. Undecorated whitewares were the only ceramics found. They have a long span of manufacture from 1820 to the present (South 1977). The majority of the glass fragments appear to date from the mid-twentieth century. The presence of primarily bottle glass suggests that the site represents a trash dump rather than a domestic site.

Table 9.
Artifacts recovered from 38BK1671

	Surface	25E	25W	50W	75W	25S	50S	Total
Undecorated whiteware	1	1	1	1		1		5
Clear bottle glass	2	2	2	1	3		23	33
Peach bottle glass							8	8
Lt. blue bottle glass							2	2
Dk. blue bottle glass	1							1
Milk glass							5	5
Amethyst glass							1	1
Window Glass				1	1			2
Total	4	3	3	3	4	2	39	58

Shovel testing indicates that the site measures 100 feet east/west by 50 feet north/south. The soils are Lynchburg fine loamy sand and the central UTM coordinates are E589900 N3666840.

Standing Structure

In addition to the four archaeological sites found, one standing structure was identified. Eight shovel tests were excavated in the immediate vicinity of the house, but no artifacts were recovered. This house is a wood frame hall and parlor structure with a detached kitchen. However, a porch and overhang connects the kitchen to the house. This house is located on the north side of a wetland and may be a farm manager's house associated with the complex of buildings identified as 38BK1668. In addition to the house, an abandoned car was found immediately to the west. This car appears to date to the 1950s. No manufacturer's name was found, although the model label was "Deluxe".

There was no identified archaeological component to the standing structure and it is approaching or is in failure. The structure is part of the complex identified by Preservation Consultants, Inc. as associated with the house recorded as U/19/0000/339 0034. Given the lack of archaeological materials and the poor condition of the house, this structure is recommended as not eligible for inclusion on the National Register of Historic Places.

SUMMARY AND RECOMMENDATIONS

During the intensive archaeological survey of the proposed Berkeley County landfill extension tract, four archaeological sites (38BK1668, 38BK1669, 38BK1670, and 38BK1671) were revisited. In addition, one standing structure with no recovered archaeological remains was revisited. No new sites were identified.

Of the four archaeological sites revisited, two (38BK1669 and 38BK1670) are recommended as eligible for inclusion on the National Register of Historic Places. The standing structure (probably associated with the twentieth century occupation of 38BK1668) is recommended as not eligible for inclusion on the National Register.

The two sites recommended as eligible for inclusion on the National Register represent the remains of an eighteenth and early nineteenth century plantation main house (38BK1669) and slave row (38BK1670). Although the sites have been plowed, only the top foot is disturbed and it is likely that both sites will exhibit intact subsurface features.

These two sites represent two distinct and important components of an eighteenth century plantation. They represent a main house (38BK1669) and a slave row (38BK1670) associated with ..... plantation. This plantation was a relatively small holding and was probably considered historically "insignificant" in comparison to great Goose Creek area plantations such as Crowfield and Broom Hall. It appears that the historic documentation for the site is sparse due to its "insignificance" since it was not the main holding of a well known wealthy planter or since it is associated with a relatively "unimportant" person. Therefore, there are not extensive family records specifically related to this plantation.

This brings up an important issue. The significance of an archaeological site should not rest on how well the plantation is documented. If only sites that were well documented were subject to archaeological investigation, the archaeological record would be greatly skewed. This is because, generally, well documented plantations are associated with only the most wealthy, well known individuals. Smaller plantations or minor holdings of wealthy planters are left out, making the picture of eighteenth century plantation life greatly distorted, further reinforcing the public's image of plantations as Tara or, even closer to home, Middleton Place and Drayton Hall. Therefore, it is important that the full range of plantation types are investigated.

Another important point is that the investigation of these two sites under the frame of "compliance archaeology" offers a rare opportunity. Often compliance work investigates only a main house or only a slave row, greatly decreasing the ability to fully understand plantation life. For instance, slave life can be best gauged in comparison to the lifestyle of the planter who enslaved them. At this level, archaeologists can move beyond the artifacts to better understand theoretical issues of power, alienation, control, and slave autonomy.

The archaeological sites recommended in this study as eligible for inclusion on the National Register of Historic Places may be either green spaced or subjected to data recovery. Green spacing is recognized as an appropriate, and often cost-effective, mitigation measure for archaeological site conservation. This procedure involves placing the site aside and protecting it from all future ground disturbing activities in perpetuity. This is usually accomplished by placing a protective covenant on the property or by establishing preservation easements, held by some other organization. five recommendations are offered (subject to the review and approval of the State Historic Preservation Office) if green spacing is to be considered:

1. The sites are to be physically blocked out in the field with a buffer sufficient to ensure the

protection of the archaeological remains;

2. The area should continue to be clearly defined during all phases of construction and use. No equipment should be allowed in the site area, or be allowed to use the area as a turn-around. The area should not be used to stockpile supplies, or be otherwise disturbed. All personnel, including contractor's and various subcontractor's personnel, should be strictly prohibited from entering the area. This is particularly important to prevent looting of the sites;

3. No utilities should be placed through the sites;

4. The property owner should develop a protective easement or covenant assuring the protection of the site areas set aside in green spacing and this protection should be in perpetuity;

5. Appropriate security should be provided to ensure that the sites are not vandalized, looted, or otherwise damaged.

Alternatively, any of the sites recommended as eligible for inclusion on the National Register of Historic Places can be mitigated through data recovery, or the excavation, analysis, proper curation of recovered remains, and publication of findings. The level of effort at each site should be sufficient to address the research questions previously raised.

Data Recovery Plan for 38BK1669

The data necessary to address the research questions previously outlined are present at 38BK1669, some of which can be accessed only through very specific data collection techniques. Landscape research requires tightly controlled surface collection and metal detection to locate artifact concentrations in the yard area as well as architectural materials suggesting the location of outbuildings. Tests should be placed in these area to locate possible architectural features. Afterwards, these areas should be mechanically stripped to uncover any additional features. Questions relating to main house design can be approached by locating the outside walls of the house. This can be accomplished by trenching the posited structure location in a cruciform pattern. In addition at least two quadrants of the house should be excavated to understand structure configuration. Excavation and controlled surface collection should be sufficient to gather comparative information about the overall artifact assemblage.

Given the lens of brick in the area of the main house, stripping is not an appropriate data recovery method, since the lens of rubble will probably serve as a "footprint" for the main house and stripping may obliterate this "footprint". Excavations at other plantation sites with similar partially intact plowzone levels (see Gardner and Poplin 1992) have used mechanical stripping to expose house and other features. This stripping potentially resulted in loss of information, particularly at one structure where features were shallow and ephemeral (see Gardner and Poplin 1992:70; 73-88).

Minimal methodological requirements of the recovery of the specified data sets at this site include:

- disking the entire site (including the area south of the wind row) to provide sufficient surface visibility;

- gridding the entire site in 20-foot blocks to be surface collected and metal detected. The metal detector should be used only to calculate number of positive readings, instead of recovery of metal artifacts. Previous work at plowed sites (see Trinkley et al. 1993) has

indicated that shovel testing/auger testing was insufficient for solidly locating site boundaries and determining artifact concentrations. Surface collection and metal detection will likely provide better results for locating areas of interest in the yard;

- computer mapping of artifact density to determine areas of interest;

- extending the auger testing at 20 foot intervals to the south to locate additional brick lenses and concentrations;

- 10-foot test units in the yard area where areas of interest are located;

- mechanically stripping areas of interest in the yard area (where the brick lens is absent) after hand excavations;

- 5 foot by 10 foot units bisecting the main house ruins into four quadrants;

- and 10 foot units in at least two of the four quadrants identified.

Data Recovery Plan for 38BK1670

The data necessary to address the research questions previously outlined are present at 38BK1670. The auger grid should be expanded to locate additional concentrations. These concentrations should be examined using 10-foot excavation units. The artifacts obtained can address comparative questions and well as how slaves benefitted or suffered from the economic position of the planter. After these concentrations have been tested, the core of the site should be mechanically stripped to located houses, yard features, and landscape features. Soil should be removed from just above the interface with subsoil. Features should then be excavated. Stripping and feature excavation can help address questions surrounding slave housing, the use the yard area, and the organization of landscape features such as fence lines.

Minimal methodological requirements of the recovery of the specified data sets at this site include:

- extending the auger grid to encompass the remainder of the site;

- computer mapping of artifact density to determine areas of interest;

- 10-foot test units where areas of interest are located to obtain a sample of artifacts;

- mechanically stripping the core area of the site to identify structures and features;

- excavation of identified features.

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APPENDIX.

PROPOSTAL TO CONDUCT ARCHAEOLOGICAL DATA RECOVERY EXCAVATIONS AT 38BK1669 AND 38BK1670

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A PUBLIC, NON-PROFIT FOUNDATION

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INTRODUCTION

This proposal has been submitted at the request of Mr. Ken Smoak for a data recovery plan for archaeological sites 38BK1669 and 38BK1670 originally identified by Chicora Foundation during the January 1993 survey of the Berkeley County Landfill Extension just south of Moncks Corner in Berkeley County, South Carolina.

Site **38BK1669** consists of the late eighteenth century remains of the Crawl Plantation thought to contain at least the main house and likely additional out buildings, such as the kitchen, storehouses, and similar buildings normally associated with rural plantations. Although the site has been plowed, survey level testing has revealed the presence of intact brick rubble at the base of the plowzone, representing a zone of intact cultural material.

A series of 21 shovel tests and 117 auger tests were used to established the site boundaries of approximately 200 by 240 feet, although the site appears to extend even further to the south, perhaps covering a total area of 500 feet square (nearly 6 acres). Based on an examination of the recovered ceramics, 38BK1669 appears to have been first occupied around 1765 and abandoned about 1830. The most intense period of occupation was between 1780 and 1830. The collection yielded an aberrant artifact pattern, most likely because of the small sample size.

The site was recommended as eligible for inclusion on the National Register based on the site's unique status as a small, inland (or interior) plantation dating from an early period of South Carolina's history. The presence of the entire settlement, thought to be in good condition, offers the potential to study a wide range of questions focusing on Berkeley County plantations during the late colonial period. Specifically, research can address:

- How does the artifact assemblage of this rather obscure plantation compare to other Goose Creek area plantations, such as Crowfield and Broomhall, which were historically well known as the exception rather than the rule? Site 38BK1669 has exhibited a relatively wide range of artifacts and associated data sets (ceramics, glass, architectural remains, tobacco items, and even clothing items) indicating that this specific question can be approached.

- How do the architectural features at 38BK1669 compare to other excavated Charleston area plantations? Is the house simply constructed or is the house more ornately designed? The plowzone at 38BK1669 did not extend more than 0.9 feet suggesting that architectural features should still be intact. In fact, other excavated plantations such as Lesesne (Zierden et al. 1986), Yaughan and Curriboo (Wheaton et al. 1983) which had been damaged by plowing exhibited large numbers of intact features. In addition, the base of the plowzone at 38BK1669 exhibited a lens of rubble and plaster indicating that features below this zone will still be intact.

- How does the architecture and the layout of the plantation complex reflect current landscape movements? In other words, does the plantation exhibit a Georgian world view? Is there evidence that the plantation was later altered to reflect the late 18th century picturesque landscape movement (see, for example, Brooker and Trinkley 1991)? Is there an initial blending of both landscape types? What does the plantation landscape at 38BK1669 tell us about the view small planters had of their world? This question can be addressed

through a combination of locating architectural features houses and outbuildings), archaeological features (fence lines and roads), the relationship of the main house to the slave row, and historic plats. Since the site area is largely plowed and the ultimate use of the site is landfill, 38BK1669 is perfectly suited to large scale site stripping at the conclusion of detailed hand excavations. This will allow features over a broad area of the site to be recorded.

Because 38BK1669 has the potential to address all of these research questions and can help to better understand plantation diversity and the effects of cultural movements on Goose Creek area small planters it has been recommended as eligible for inclusion on the National Register of Historic Places.

The data recovery plan proposed is designed to specifically address the significant research questions which make this site eligible for inclusion on the National Register. The methodology proposed is likewise designed to provide the data necessary to answer the proposed questions.

Site **38BK1670** is thought to represent the slave settlement associated with the late eighteenth century Crawl Plantation. Although plowed like it sister site, 38BK1669, 38BK1670 indicates a diverse cultural assemblage with a sizeable portion of the collection in excess of what is typically found in plowed contexts. This suggests that portions of the site remain relatively intact and that features are present below the Ap horizon.

A series of 20 shovel tests, 176 auger tests, a pedestrian survey, and metal detecting on transects were used to establish the site boundaries of 600 feet by 300 to 550 feet (forming an "L"- shaped site covering nearly 6 acres). The density mapping produced reveals an irregular scatter of artifacts with multiple concentrations -- likely representing individual structures or other activity areas. This finding tends to support the assessment that portions of the site remain intact, in spite of plowing. Offering yet additional evidence is the comparison of the various collections by site area. In the north the collection is dominated by very high quantities of Colono ware -- a pottery made by African American slaves. To the south a different profile -- dominated by European ceramics -- was observed. It is possible that an overseer's structure may be responsible for this different assemblage in the southern portion of the site. Examination of the recovered ceramics suggests that the site was initially occupied about 1765. The most intense period of occupation was between 1765 and 1820 -- very similar to the findings at 38BK1669.

An examination of the site's collection reveals a pattern somewhat similar to the Carolina Slave Pattern. There is perhaps evidence that the slave houses were constructed in a way which minimized durable architectural objects such as window glass and nails.

Although plowing has damaged portions of the upper 1.0 foot of the site, there is good evidence that architectural and other features will be found intact under the plowzone. Similar situations have occurred at other Berkeley County slave rows such as Lesesne (Zierden et al. 1986), Yaughan, and Curriboo (Wheaton et al. 1983). A number of relatively large artifacts were recovered from the surface suggesting that plowing has not completely "chewed up" the artifact bearing zone. The sparsity of architectural materials and brick suggest either post construction, post and trench construction, or some other more ephemeral construction.

Because of the late eighteenth century assemblage, the potential for recovery of both slave and overseer or driver assemblages, and likelihood of intact features, the site can address a number of significant research questions. It is also exceptional that both the owner and slave assemblages can be explored since it is essential that we understand how the two interacted on the plantation.

Specific research questions proposed for this site include:

- How does the artifact assemblage compare with other slave sites and with the assemblage

at the plantation main house (38BK1669)? What does it tell us about the similarity or variability found at plantation slave rows? Only a few eighteenth century slave sites have been excavated in South Carolina while a much larger number of nineteenth century slave sites have been examined. Eighteenth century sites associated with slaves are few and scattered. They include Yaughan and Curriboo in Berkeley County (Wheaton et al. 1983), Willbrook Plantation in Georgetown County (Trinkley 1993), Cotton Hope Plantation on Hilton Head Island (Trinkley 1990), and Wappoo Plantation in Charleston County (Gardner and Poplin 1992). Clearly, more eighteenth century sites need to be examined, at both a statewide level and an intra-regional level.

- How does the architecture compare with what is known archaeologically and historically about eighteenth century Berkeley County slave houses (Wheaton et al. 1983; Zierden et al. 1986; Drucker and Anthony 1979; see Adams 1990 for a synthesis) as well as other areas of the state? Previous research (see Adams 1990) has suggested that historical accounts of slave housing do not coincide with what has been found archaeologically. Although only a few houses have been excavated, more data is needed to better understand diversity and dichotomy between written documents and the archaeological record.

- How does the slave row and the surrounding area fit into the planter's landscape concept? Are houses rigidly aligned or are they unevenly placed? Is there evidence for fences? If yard features are present, what do these features suggest about the use of extramural space by slaves in the eighteenth and early nineteenth century (see Westmacott 1992; Ferguson 1992; Adams 1990)? Although the landscape concept is not new to the humanities, only recently have archaeologists tried to implement field techniques to begin understanding historic landscapes. In South Carolina, very few plantation sites to date have been excavated with the goal of better understanding the arrangement of structures, work areas, fences, roads, and fields.

- Is there evidence for alienation of the slave population? Some (Terry 1981; Orser 1988) have suggested that this alienation took place in the mid-eighteenth century as planters obtained more and more wealth. They then separated themselves physically and materially from their slaves. In other words, although the planter became richer, the slaves' conditions did not improve, increasing the gap between planter and slave. Is there evidence that slaves benefitted from the plantation owner's wealth? Terry's (1981) historical research and economic model of St. John's Parish (including the study area) provides an opportunity to explore the use and display of wealth and its implications for the slave population. Archaeological investigations to identify type of housing and the artifactual assemblage can address these questions as well as historical research to locate wills and inventories.

Because 38BK1670 has the potential to address all of these research questions -- many of which incorporate new ways of looking at the archaeological data (such as exploring the historic concept of alienation with archaeological data) and can help to better understand the lives of African American slaves in the Goose Creek area it has been recommended as eligible for inclusion on the National Register of Historic Places.

The data recovery plan proposed is designed to specifically address the significant research questions which make this site eligible for inclusion on the National Register. The methodology proposed is likewise designed to provide the data necessary to answer the proposed questions.

In summary, these two sites represent two distinct and important components of an eighteenth century plantation. They represent a main house (38BK1669) and a slave row (38BK1670) associated with Crawl Plantation. This plantation was a relatively small holding and was probably considered historically "insignificant"

in comparison to great Goose Creek area plantations such as Crowfield and Broom Hall. It appears that the historic documentation for the site is sparse due to its "insignificance" since it was not the main holding of a well known wealthy planter or since it is associated with a relatively "unimportant" person. Therefore, there are not extensive family records specifically related to this plantation.

This brings up an important issue. The significance of an archaeological site should not rest on how well the plantation is documented. If only sites that were well documented were subject to archaeological investigation, the archaeological record would be greatly skewed. This is because, generally, well documented plantations are associated with only the most wealthy, well known individuals. Smaller plantations or minor holdings of wealthy planters are left out, making the picture of eighteenth century plantation life greatly distorted, further reinforcing the public's image of plantations as Tara or, even closer to home, Middleton Place and Drayton Hall. Therefore, it is important that the full range of plantation types are investigated. These two sites have the ability to provide balance and perspective so necessary for our understanding of the past.

Another important point is that the investigation of these two sites under the frame of "compliance archaeology" offers a rare opportunity. Often compliance work investigates only a main house or only a slave row, greatly decreasing the ability to fully understand plantation life. For example, at Yaughan and Curriboo the authors specifically pointed out that the research was limited by their inability to incorporate the remainder of the plantation. Slave life can be best gauged in comparison to the lifestyle of the planter who enslaved them. At this level, archaeologists can move beyond the artifacts to better understand theoretical issues of power, alienation, control, and slave autonomy.

PROPOSED DATA RECOVERY EXCAVATIONS

General Statement

Chicora's approach to data recovery at the two archaeological sites on the Berkeley County Landfill extension tract involves a program of research necessary to:

(1) satisfy the requirements of the State Historic Preservation Officer (SHPO) and collect the information necessary for compliance with the National Historic Preservation Act of 1966 and the regulations of 36CFR800, and

(2) address both the broad research questions typically associated with sites of these types, as well as the very specific research questions previously discussed. This research framework is an essential aspect of the compliance procedures. Without a clear understanding of previous work and research domains, it is impossible to ensure that the data is collected in a meaningful or adequate manner, or that the analyses of the collected data will offer substantive contributions to our understanding of past lifeways.

The work proposed involves essentially four levels of research activity:

(1) additional historical research,

(2) archaeological data recovery at the two sites,

(3) analysis of the collections, and

(4) report production.

This section of Chicora's proposal details how each phase of activity will take place.

Historical Research

As a result of Chicora's initial research, a generalized chain of title of title has been assembled for the tract. Originally part of Sir Peter Colleton's 4423 acre Mulberry Plantation, the property was likely not intensively used at least until Thomas Broughton's ownership beginning in 1708. In 1723 the tract was sold to John Gibbes and it stayed under Gibbes or Middleton ownership until 1814, a period of 91 years. During this period the property was known as Crawl Plantation, not being called Oakley until after the property was sold to Dr. H.M. Haig. It is likely that during this period that the plantation was gradually developed. The period from the first decade of the nineteenth century through about 1850, unfortunately, is poorly understood. There is evidence that the tract was owned by Dr. H.M. Haig, a "Mr. Dawson," and Stading Dangerfield. By 1858 the property was acquired by Nathan Guyton, who maintained the plantation through the Civil War. Oakley remained in the Guyton family until 1940 when it was sold to W.K. Fishburne, who conducted a relatively extensive tenant farming operation at the plantation incorporating at least tobacco farming, probably with cotton planting. By 1971 the property had passed to investors.

Additional historical research is clearly necessary, given the numerous, and quite glaring, gaps in our current understanding. The research proposed for the data recovery stage will concentrate on the first half of

the nineteenth century in the hope of documenting ownership and plantation activities prior to the Civil War. Just as reasonably, the eighteenth century ownership of the Broughtons deserves more careful attention, both to more fully understand plantation activities during this formative period as well as to document the various family owners. Additional historical investigations may also be able to assist in our understanding of how settlement locations changed through time, perhaps in response to the changing ownership and boundaries.

Although it seems likely that after the Civil War plantation activities continued using freedmen and this transition from slavery to the use of free operatives is worthy of more careful investigation, it is not associated with the identified National Register eligible sites and will not be further explored.

Additional historical research will consequently concentrate on further research at the South Carolina Department of Archives and History, primarily in the federal census records, and agricultural and slave schedules. The Charleston County RMC records will be explored in greater detail to help fill in the gaps in ownership. The South Caroliniana Library and the South Carolina Historical Society holdings will be explored in the hope of finding some additional information concerning Crawl Plantation.

This research is anticipated to require one week of additional research.

Archaeological Data Recovery

General Information

The first activity at both sites will consist of lighting disking the field at 38BK1669, ideally done at least two weeks prior to the field work. Disking, limited to the upper 0.5 to 0.7 foot of soil will not further damage the sites and will provide excellent surface visibility essential for later phases of the investigation

Investigations at each of the sites will follow professionally accepted standards. Each site will be tied into a permanent grid to provide both horizontal and vertical control. Unless otherwise specified, the minimal excavation unit will be a 5 by 10 foot unit, although typically 10 by 10 foot units (potentially divided into quadrants for greater analytical precision) will be used for horizontal control.

The excavations will be by the natural soil zones -- anticipated to be the plowzone underlain by an intact rubble zone. It is essential that these two strata be carefully distinguished for precision in dating and, especially, in reconstructing architectural features.

Excavation will be by hand with all fill dry-screened through ¼-inch mesh to ensure the recovery of cultural materials. Flotation samples (typically 5 gallons in size) will be collected from areas which exhibit a high potential for the recovery of ethnobotanical remains. All materials will be collected, except for brick, mortar, and shell which will be weighed and discarded in the field.

Each unit will be troweled at the top of subsoil, photographed in b/w and color slide film, and profile and plan views will be drawn. Drawings and/or photographic documentation will occur more frequently as conditions warrant, for example it may be appropriate to record units at the base of the plowzone *and* at the base of excavations.

Features encountered during the excavations will be plotted and photographed. Features, or samples of redundant features, will be bisected to provide profiles, photographs, and drawings. All feature fill will be screened through 1/8-inch mesh. Samples retained will minimally include a soil sample and flotation sample(s).

Mechanical water flotation of soil samples for ethnobotanical remains will be conducted by Chicora

personnel in the field and the analysis will be conducted by Dr. Michael Trinkley. Of particular importance in this work will be the identification of food remains and the collection of subsistence data.

Faunal materials, if of sufficient quantity and quality will be examined by Dr. Jack Wilson. These investigations will include estimations of biomass, species diversity, and equitability determinations. The results of these studies will be compared to recent investigations at other similar sites from which comparative data are available.

Excavations will be backfilled at the conclusion of the project through the use of heavy equipment to be provided by the client. During the project excavation units will be roped off for security and will be covered with black plastic.

38BK1669

At the conclusion of the disking and a good rain to expose the artifacts the site will be gridded into approximately 625 20-foot collection units. The 20-foot size was selected as the minimum size manageable for a site of this size which will also be able to provide information on the presence, and location, of the various plantation buildings for the exploration of landscape questions. It is anticipated that a day will be required to lay out the site grid, while an additional three days will be required to collect the grid and record the information for mapping purposes.

In addition to the collection, a metal detector survey will also be implemented, with "hits" simply recorded per 20-foot unit. This technique will provide data on nail distributions as an indicator of building locations. Since nails are rarely included in surface collections (being small, often fragmentary, and rarely seen), the metal detector provides a unique approach to addressing the proposed research questions. This is a cost-effective technique, anticipated to require only one day of investigation.

Based on the metal detection and the controlled surface collections, the main house area (which we believe has already been roughly defined by the survey level investigations) will be bisected by a series of 5x10 foot units. Assuming a structure no larger than about 30 by 60 feet, nine units will be sufficient to explore the concentration, examining the defined area for architectural features. This work is anticipated to require 3 field days by the entire crew.

Once completed, an additional 900 square feet may be excavated to further refine information on the structure's architectural detailing. These may be concentrated in one or two areas of the structure, or may be more dispersed, depending on the findings of both the collected surface collection and the initial nine 5 by 10 foot units. This is anticipated to require nearly a week of field time.

A series of up to 4 10-foot units will also be dispersed over the remainder of the site to explore additional artifact concentrations revealed by the surface collection or the metal detector survey. These units will be sized to optimize recovery of landscape features. For example, if structural indications are found (i.e., recovery of architectural remains during the controlled surface collection and a concentration of metal detector "hits,") then minimally a 10-foot unit would be used. However, if the initial indications are more suggestive of trash middens (presence of animal bone, ceramics, glass) then minimally a 5-foot unit may be used. The goal throughout will be to explore these concentrations collecting controlled excavation data prior to the next, and final, stage of study. This work will require two field days.

At the conclusion of the controlled excavations, heavy equipment supplied by the client will be used to strip areas of artifact concentrations. The goal here will be to either expand the information identified in the controlled excavations (i.e., recover the remainder of architectural footprints) or to search for information too ephemeral to be found in 10-foot units (staining associated with roadways or paths, fence lines, and similar landscape features).

At this site the first activity will be to reconstruct the auger test grid, expanding it to encompass the area not explored in the survey. The goal of this work, anticipated to require only two days (one day of grid work and one day of auger testing) is to allow the full range of artifact concentrations to be viewed on one computer density map. Meanwhile, up to 600 square feet of excavation will be placed in various site areas, including previously defined concentrations thought to represent slave structures and the area thought to represent an overseer's area. This work will require three field days. The goal of these controlled excavations will be to obtain sample collections suitable for dating and pattern analysis, while exploring for architectural and yard features potentially associated with the site.

Recognizing, however, that the slave structures associated with 38BK1670 are likely to be very ephemeral, we are also proposing broad stripping of at least four site areas. Ideally stripping would be conducted in the posited overseer's area, as well as at three slave structures. This work will do more than simply document architectural features, it will also allow examination of near and far yard use areas to examine functional loci. Monitoring of the grading will require one day, while an additional three days are allotted to record and sample the exposed features. We do not believe that it is necessary to excavate every trench feature or post hole which may be exposed, although it is appropriate to obtain a sample useful for cross dating and functional interpretation.

The Use of Heavy Equipment

The disking should be done with a tractor sufficiently large to allow good movement, preventing the harrow from "sinking in" and damaging intact archaeological features at 38BK1669. Likewise, the plowing should be done in dry weather to prevent damage to the site. If the fields are not dry, then a very small tractor, such as a "Farm All" should be used. Although the disking would not be as deep, and the time to complete the job would be much longer, this small tractor is not as likely to damage the site. The disking must be done *several weeks prior to the scheduled field work to allow adequate time for the fields to be rained on*. Disked fields which have not been rained on offer even less visibility than fields not disked and will not allow the implementation of the data recovery plan. Some flexibility, however, is offered by our ability to begin the investigations at 38BK1670.

The stripping operations can be accomplished with either a small bulldozer or a grader. The smaller equipment, although having a shorter blade and less traction, is also less likely to sink into the subsoil, providing a cleaner pass. While there are distinct advantages and disadvantages associated with both pieces of equipment, as well as with the size of the equipment, we have found that the key is the operator. Consequently, we would prefer an excellent, experienced operator over any particular piece of equipment.

Analysis

While it is difficult to anticipate the quantity of remains to be recovered from 38BK1669 and 38BK1670 based on the limited work conducted at these and similar sites, we believe that the excavations will produce a rather large collection of historic remains, including ceramics, glass, and metal artifacts. In addition there may be zooarchaeological (faunal) materials, and ethnobotanical (carbonized floral) remains, at least from feature contexts.

The first phase of analysis will be the washing and rough sorting of collections. This work may take place in the field, during rain periods, with completion in the Chicora laboratories.

The second phase of analysis includes final sorting and cataloging, which will be conducted at the Chicora laboratories in Columbia. Ms. Hacker will be responsible for the cataloging, conservation, and curation of the collections. Faunal materials will be sorted out and sent to Dr. Wilson for additional study.

Ethnobotanical materials will be separated for study by Dr. Trinkley.

All of these various specialized analyses are time consuming and this has been factored into the project schedule as outlined in the following section of this proposal. The various aspects of the subsistence studies have been previously discussed and will be only generally outlined in this section.

If suitable material is obtained, the faunal studies will examine:

- minimum number of individuals represented,
- biomass of species represented,
- seasonality indicators,
- possible procurement and butchering techniques,
- diversity of species, and
- equitability determinations for the recovered species.

The ethnobotanical examination will include:

- identification of wood species recovered,
- seasonality indicators, and
- identification of food remains, including both wild and domesticated species.

Of considerable importance will be the integration of these studies into a coherent picture. An attempt will be made to qualify the importance of each resource to the diet and to integrate the total site assemblage into the subsistence system. Of equal importance is the comparison of various site assemblages.

The temporal, cultural, and typological classification of historic remains will follow Noel Hume (1970), Miller (1980), Price (1979), South (1977), and others. Pattern studies, mean ceramic dates, and status studies, as appropriate, will be conducted on the historic artifacts recovered from the excavations.

Some artifacts, once removed from the stable environment of the soil, begin to rapidly deteriorate and items of bone and shell are particularly prone to further deterioration as a result of excavation. Consequently, all such artifacts recovered from this work, in accordance with professional archaeological standards, will be evaluated for their need to be conserved. Chicora will undertake to ensure the adequate conservation of all recovered items prior to their curation. Chicora Foundation is one of the few research facilities which is fully equipped to conduct archaeological conservation.

Chicora will also provide the curatorial facility field records and photographic documentation in archival condition. For example, Chicora's field records will be on alkaline buffered, pH neutral paper and photographic materials will be processed to archival standards. Chicora is one of the few research institutions which maintains such high standards.

Report Production

Report production will involve the submission of a management summary within two weeks of the completion of the field work at the two sites. This management summary will be a greatly condensed report which will provide the sponsor with information on the field methods and preliminary findings. This management summary will also certify to the S.C. State Historic Preservation Office that the research has been conducted in a thorough, professional manner consistent with the approved research design.

Report production will also involve the development of a professional monograph, detailing the scope

of the work, the effective environment, that nature and history of the project area, the field methods, the laboratory and analysis methods, the results of the study, the results of specialized studies, and references cited.

The format and style of the final monograph will resemble previous Chicora Foundation *Research Series*. A draft report will be submitted for review by the sponsor and the S.C. State Historic Preservation Office, as well as for peer review. Five bound copies of the final report would be submitted to the client. Chicora will also distribute the report to professional and lay audiences to ensure that the findings are available to the community. The dissemination of this information is a significant aspect of compliance archaeology, since the work is being undertaken to preserve a significant aspect of South Carolina's heritage.

At this stage Chicora Foundation will transfer the recovered artifacts, field notes, and associated records to a permanent curatorial facility.

Benefits to the Client

There is a cost associated with archaeological research. It involves a number of individuals with very specialized training and a variety of expensive analytical techniques. But there are ways of ensuring that the Client, even a county as in this case, receives clear, positive benefits from the work (beyond the permits necessary to proceed with the original project).

For example, Chicora Foundation is able to integrate into this proposed project an educational component which would help Berkeley County students benefit from the project. This would include actual visits by classes to see archaeology in process, as well as the development of curricula materials for the use of Berkeley County teachers.

Chicora Foundation can also work with the new Berkeley County Museum to develop a display of the artifacts to excite local interest.

We can work with the local media to make sure the public realizes that the work is being done because Berkeley County is proud of its heritage and wants to preserve the past.

All of these programs provide Berkeley with good public relations. They make sure that the public understands why the work is being done, and that the results of the study have immediate impact on them and their kids. It defuses controversy and instills a good feeling that the County's administration is concerned about providing its citizens with a good quality of life.

Chicora with a decade of experience is the only heritage preservation organization in the Southeast with the kind of experience necessary to incorporate all of these programs into cost-effective archaeological research.

SCHEDULE

Chicora Foundation recognizes the need to provide the Berkeley County Landfill Extension project with services in a timely and cost-effective manner. While no specific start date is proposed, we will work with the client to develop a schedule which is satisfactory to all of the parties involved. Typically it is possible for the Foundation to schedule work within 15 days of being notified to proceed.

We anticipate that the field investigations at 38BK1669 and 38BK1670 will require a crew of five archaeologists (including the Principal Investigator) approximately five weeks (25 field days).

The management summary for the data recovery excavations will be provided within two weeks of completing the investigations and the analysis will begin immediately. A draft report will be provided within 10 weeks of completing the field investigations (although this time can be reduced, we must necessarily involve other experts in the analysis and the schedule must take into account their needs to conduct thorough, professional studies).

The review of the draft archaeological study is anticipated to require 30 days by the client and S.C. SHPO. Immediately upon receipt of comments, Chicora Foundation will make the necessary revisions and have the final report readied for distribution.

PROJECT PERSONNEL

Dr. Michael Trinkley will serve as the Principal Investigator for this Project. Dr. Trinkley has over 20 years of experience in Southeastern archaeology and is a recognized expert in plantation and prehistoric archaeology. His research has included excavation and analysis of plantation sites dating from the eighteenth through late nineteenth centuries and he has tremendous experience in the South Carolina Low Country, including work at the Kiawah Shoolbred and Vanderhorst plantations. In addition, he has explored nearby Crowfield and Broom Hall plantations,, examined over a dozen plantations in Beaufort County, and has conducted extensive research at three eighteenth century Waccamaw Neck Plantations.

He received his doctorate from the University of North Carolina in 1980. He has published numerous scholarly studies with both Chicora Foundation, University of Alabama Press, and others. Dr. Trinkley is also active in public outreach programs, speaking to teachers, historical organizations, and museums.

Dr. Trinkley served as a senior archaeologist with the State of South Carolina prior to assuming the directorship of Chicora Foundation in 1983, a position he has held since that time. Dr. Trinkley is a registered consultant with numerous state and international agencies. He will serve on the current project in a full time capacity.

Ms. Natalie Adams will serve as the Field Director on this project. She received her M.A. in anthropology from the University of South Carolina in 1990 and has been associated with Chicora Foundation as a Research Archaeologist since 1989. Her research has included a variety of prehistoric and historic sites in North and South Carolina. She has been involved in over 20 field projects and has expertise in ceramic analysis, field methodology, and statistical analysis.

Ms. Adams was field director for the original survey work at Crawl Plantation and her involvement in this project will ensure continuity. She has also been involved in numerous projects on Kiawah Island, as well as plantation excavations in Berkeley, Georgetown, and Beaufort counties. She will also be associated with this project in a full-time capacity.

Ms. Debi Hacker will serve as the Laboratory Supervisor and Conservation Administrator for this project. She has nearly 10 years of experience in Southeastern archaeology, including prehistoric work in Kentucky, urban archaeology in Charleston, South Carolina, and industrial archaeology in Columbia, South Carolina. She is a recognized expert in laboratory analysis and conservation treatments. Prior to joining Chicora Foundation she was associated with The Charleston Museum and later served as the Conservation Administrator with the South Carolina State Museum.

Ms. Hacker obtained her B.A. in Anthropology from Tulane University and has received additional training in conservation and preservation techniques. She has published extensively on archaeological, research, and conservation topics. She will be responsible for the analysis, conservation, and curation of the collections. She will work on this project in a full-time capacity.

Chicora Foundation will use highly experienced consultants for several specialized studies. The examination of faunal remains recovered from the site will be undertaken by Dr. Jack Wilson, a Research Associate with Chicora Foundation. Dr. Wilson is one of the foremost faunal specialists in the United States and has worked with the Foundation on a variety of projects, including others in Beaufort, Georgetown, and Charleston counties.

The field crew will consist of additional Chicora Foundation employees with special training and expertise in historical archaeology. All personnel will be highly qualified and dedicated to providing Berkeley County with professional, cost-effective research.

CHICORA FOUNDATION QUALIFICATIONS

Introduction

Chicora Foundation was chartered in 1983 by the State of South Carolina and is recognized by the Internal Revenue Service as a 501(c)(3), public, non-profit organization. Our Federal Identification Number is 57-0774537.

The financial records of the Foundation are handled by Hobbs and Corley, CPAs. Both the Foundation's checking and savings accounts are handled by NationsBank in Columbia, South Carolina. Chicora Foundation has no long-term indebtedness to any individual, corporation, or other entity. Legal matters are handled by the McNair Law Firm, PA and Gerald Jowers, Esq.

Chicora Foundation maintains a $1,000,000 comprehensive general liability policy with Selective Insurance Company through our agents, Southern Insurance Group, LP. Our Workman's Compensation Insurance is also carried by Selective Insurance Company.

The Foundation complies with all applicable employment regulations and is in full compliance with EEOC guidelines. Chicora Foundation complies with Title VI of the Civil Rights Act of 1964 (P.L. 88-352), to the end that no person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. The Foundation also complies with the Age Discrimination Act of 1975, which prohibits discrimination in hiring on the basis of age. Chicora Foundation has also taken steps to ensure that it is in compliance with the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986, and the Drug-Free Workplace Act of 1988.

Chicora Foundation is particularly aware of its responsibility to provide employees with safe working conditions. We conduct internal safety audits and have developed a Hazard Communication Plan and a Respiratory Protection Plan for our employees. We are currently working to implement a Laboratory Hygiene Plan as required by OSHA. At least one member of Chicora Foundation has received a 40 hour OSHA mandated course in hazardous waste and emergency response. Two principals have received First Responder First Aid training, and two individuals are trained in CPR.

The Foundation subscribes to the Code of Ethics and Standards of Practice of the American Institute for Conservation of Historic and Artistic Works, the Code of Ethics of the American Association of Museums, and the Code of Ethics of the Society for American Archaeology.

Chicora Foundation Programs

Chicora Foundation, since its inception in 1983, has had three primary missions:

- archaeological and historical research and publication,
- museum support and preservation programs, and
- educational programs and public outreach.

Clearly, each of these is, or can be, interrelated to the others. And each is based on the underlying goal of the Foundation: *to preserve the past for future generations.* Our heritage, whether in the ground, in material culture, or in historic records, is worthy of preservation, study, and dissemination to the public.

Archeological and Historical Research

While centered in South Carolina, Chicora has also conducted research in neighboring North Carolina and Georgia, and consults with archaeologists and historians from as far afield as Vermont, Puerto Rico, and California. A large proportion of this research results from collaborative ventures with the business community and involves surveys and large-scale excavations at sites where development is taking place. Additional research results from state and/or federal grants.

Specific examples include intensive excavations at large and important archaeological sites such as:

- Fish Hall, a Stallings Phase site on Hilton Head Island,
- Mitchelville, a Freedmen's village on Hilton Head Island,
- Broom Hall, an early eighteenth century plantation,
- Bass Pond, a National Register Thom's Creek phase site on Kiawah Island,
- Callawassie, a series of four Middle Woodland sites, and
- 38BU833, a diffuse St. Catherines and Savannah phase shell midden on Hilton Head Island.

Coupled with this archaeological research is Chicora's commitment to the long-term preservation of its findings. This is being carried out in three ways which are largely unique to this foundation:

- conservation of archaeological specimens,
- archival preservation of field records and documentation, and
- publication of reports on permanent paper coupled with wide-spread dissemination.

Chicora Foundation is currently the only research organization in the Southeast which is taking these steps to ensure that the archaeological heritage is made widely available and is preserved for future generations.

All archaeological materials are evaluated for long-term conservation needs; metal and organic specimens are treated in-house prior to curation. While not the only archaeological conservation facility in the Southeast, Chicora's is the only one which *routinely* conserves samples of all objects from every excavation. Field records and documentation such as photographs and notes, are prepared to archival standards, meaning that the materials are considered stable for 200+ years under proper storage. No other organization approaches Chicora's standards in this area. Finally, Chicora is the only organization in the Southeast which publishes its reports on pH neutral, alkaline buffered paper and provides free copies to major research, college, and public libraries. Currently Chicora Foundation publications are routinely sent to 40 institutions without charge, including the Library of Congress, University of Michigan, Harvard University, Heye Foundation, and eight facilities in South Carolina.

Database Design and Management is a growing area of cultural resource concern. Chicora Foundation has approached the issue cautiously, preferring use of widely available PC database management programs such as Q & A® or Revelation®. Both are rational databases which are user and solution oriented, rather than programmer oriented. In addition, Chicora also recognizes the need for a wide variety of statistical tools and uses Scientific Programming Enterprises Plot-It® for interactive graphics and statistics, although for simple applications we use Mystat® or PFS:First Graphics®. Word processing is achieved using Word Perfect®, version

5.1. All studies are available as hard copy, 3½-inch disk, or 5¼-inch disk (DSDD or high density).

The bulk of our graphics are prepared using MacIntosh programs such as Cricket Graph®, Aldus Freehand®, and Pagemaker®. Contour mapping and statistical graphs are prepared using DeltaGraph Professional® and Computer Systemics GeoView®.

Because of Chicora's broad range of preservation experience we recognize an equally broad range of data management implications, such as the permanence of various media and the obsolescence of equipment capable of reading files. We have advised museums and archives on issues relating to video and magnetic tape, computer disks, and optical discs. Chicora Foundation has the technical skill to assist in the selection of long-term data management approaches, including retrospective conversion, preservation microfilming, and paper-based storage.

The Foundation's historical research largely, although not exclusively, has been associated with on-going archaeological projects such as the excavation of the freedmen's village of Mitchelville, or the excavation of sites such as Haig Point or the Reed Gold Mine. Some historical research, such as that conducted for the Baynard Plantation, is intended for the completion of National Register nomination forms. Other research, such as the reconstruction of plantation locations and vegetation patterns on antebellum Hilton Head Island, is intended for use in museum exhibits. Other work, such as the study of nineteenth century funeral hardware, is intended as basic research useful to a wide range of scholarly studies.

Over the past eight years the Foundation has been fortunate to have a number of excellent business partners, including **International Paper, Westvaco, Kiawah Resort Associates, The Litchfield Company, Walling Grove, Carlton P. Knoll Interests, Callawassie Development Corporation, Eden and Avants Realty, RSR Corporation, Spring Island Development Corporation, Melrose Company** and **Hoffmann-La Roche**. We have also conducted research for a number of municipal, state, and federal agencies, including the **Town of Hilton Head Island, Beaufort County Recreation Commission, Allendale County, Spartanburg County, Georgetown County, Charleston County Parks and Recreation, Pee Dee Regional Council of Governments, S.C. Department of Archives and History, U.S. Forest Service, U.S. Fish and Wildlife Service**, and **U.S. Postal Service.**

We have conducted over 40 major research projects and approximately 250 smaller studies.

Education Programs

Education is inherent in all aspects of Chicora's work. Archaeological research generates newspaper publicity bringing the past to thousands of readers. Preservation assessments are a vehicle to educate museum and library staffs in a range of preservation issues. Consulting on archaeological conservation is an opportunity to emphasize the importance of ensuring that archaeological collections are available for future researchers.

Over the past year, Chicora Foundation has received excellent press, with several articles going out on the AP wire. We have even been featured in the *New York Times*. And we have been interviewed on SC ETV, WVOC, and WIS TV. Each of these events has been an opportunity to emphasis the importance of heritage preservation.

These activities have reached thousands of individuals, promoting not just the Foundation, but also specific projects and a general respect for our heritage. For example one program on WVOC Radio was conducted for International Museum Day and took calls from listeners who were interested what they should do to preserve their own family heirlooms. One of our appearances on WIS TV explained to viewers how South Carolina's archaeological sites were being damaged by development and vandalism.

Another aspect of the Foundation's education program includes developing programs for teachers, working with school kids, talking to public groups, and presenting professional seminars. Chicora's educational programs are of tremendous importance and are expanding dramatically. Over the past year we estimate that we have **quadrupled** the number of kids reached by the program. During the 1991-1992 school year we visited with over 3500 school kids across the state. During the current year we anticipate that number to exceed 4500!

Chicora Foundation was also invited to participate in the South Carolina Curriculum Conference by senior members of the South Carolina Department of Education. We have met with Dr. Barbara Nielsen, State Superintendent of Education, to explore ways that Chicora can be even more effective in the schools. We continue to explore ways of developing multidisciplinary educational programs for low income, at risk children. We have received educational grants from the **South Carolina Humanities Council, Charleston County**, and the international pharmaceutical company, **Hoffmann-La Roche.**

Our approach to public education is unique -- we are not trying to teach kids how to be archaeologists. We are not lecturing them on dates, arrowheads, and excavation techniques. Instead, we are using the thrill of the past to turn kids onto learning. Chicora Foundation is devoting considerable time to developing *socially responsive programs* -- programs that reach out to the low income, at risk student and offer them an incentive for learning. Programs, for example, that emphasize the ethnic heritage of African American students and help them explore their "roots," and help them see that they have a heritage to be proud of.

Chicora Foundation has also worked with other organizations, such as the South Carolina Department of Archives and History, to develop publicly oriented brochures. The most recent example is the "South Carolina Archaeology -- Reflections of Our Past," brochure prepared as part of a National Park Service Survey and Planning Grant. Designed to provide simple, concise information on the archaeology of South Carolina for the general public, this brochure is a favorite among teachers who are looking for a short piece they can integrate into their classroom studies.

Over 5000 of these brochures have been distributed to teachers, students, and the general public.

Chicora Foundation has also prepared three curricula for class room teachers. One discusses the economic and social history of tobacco production in South Carolina. Another discusses Native Americans, slaves, and tea production in Charleston County. The third is centered around work in Florence County, South Carolina and includes sections on Native Americans, African American slaves, and early twentieth century tenant farmers.

All of our educational programs begin with sound professional research and translate that information into a format which captures the interest and excitement of the public.

Museum Support and Preservation Programs

Chicora has begun programs designed to provide preservation expertise to a wide variety of groups. The Foundation has sponsored or participated in seminars in the areas of:

- archaeological conservation methods,
- integrated pest management,
- fire safety, and
- environmental monitoring and control.

Chicora has also lectured to groups on general preservation issues such as disaster planning, preservation management, and archival techniques.

Chicora has provided pro bono preservation consulting to a number of small museums and facilities in South Carolina, such as The Horry County Museum and the Historic Beaufort Foundation, as well as to larger institutions in the Southeast, such as the North Carolina Department of Cultural Resources and the Georgia Department of Archives. Chicora was also retained by the South Carolina State Museum to design, install, and equip its Conservation Laboratory. Similar consulting services were provided to the Institute of Archaeology and Anthropology at Yarmuk University in Jordan, and the Foundation is working with the Puerto Rican State Historic Preservation Office on the design and installation of a metals conservation facility.

Chicora has received excellent support from the business community through equipment grants for our conservation laboratory and training seminars. Support has been received from **Cole Parmer Instrument Company, Scientific Sales, American All Safe Company, Light Impressions, Nalge, Vaisala, University Products, Foredom Electric Company, Mitutoyo, OMEGA Engineering, Lab Safety Supply, Direct Safety Company,** and **Baxter Healthcare.**

The Foundation has provided services to over 40 institutions and in the past year alone has offered preservation training to nearly 100 professionals in South Carolina, Georgia, Florida, North Carolina, and Tennessee.

Chicora Foundation Facilities

Chicora Foundation maintains approximately 1000 square feet of office and laboratory space, with additional dedicated conservation laboratory space and darkroom facilities. The conservation laboratory is equipped to handle routine treatments of metals, bone, leather, wood, and composite specimens. Specific equipment includes desiccator cabinet, electrolytic reduction tanks, ultrasonic cleaner, electronic balance, Foredom power tool, and spray box. Laboratory equipment includes such items as Mitutoyo Digametic calipers, American Optical binocular microscope, and comparative prehistoric ceramics, lithics, and ethnobotanical collections. We have the equipment on-hand for a variety of survey, testing, and data recovery projects, including mechanical sifters, hand roller screens, water pump, electric generator, power auger, water flotation system, transits, and Nikon 35-mm and 4x5-inch cameras.

Chicora also uses Garman GPS (Global Positioning System) -- allowing pin-point accuracy of site locations. We also use flumgate compasses, providing greater reliability and accuracy than normal instruments.

In-house computer capabilities include both IBM-compatible and MacIntosh systems, with word-processing, density mapping, spread sheet, graphics, and statistical packages as previously discussed in detail.

Chicora Foundation maintains a 3500+ volume library, including monographs and serial publications from throughout the Southeast. Our library also contains one of the largest collection of preservation/conservation reference materials in South Carolina. The foundation also maintains an extensive collection of reference maps, as well as research materials and indices from various national repositories, including the Smithsonian, Southern Historical Collection, National Archives, and Library of Congress.

Chicora Foundation Registrations

Chicora is registered as a consultant with the Caribbean Development Bank, Inter-American Development Bank, World Bank (DACON Registration Number C-765), and the United Nations Development Program (Registration Number 05914).

Quality Control

Chicora Foundation is able to consistently produce quality products because of our team effort. Each individual in the organization, from the field technicians to the research archaeologist to the conservator, realize that their efforts are critical to the success of the project. The foundation has extensive experience in multidisciplinary research, routinely incorporating data from Research Associates in fields such as zooarchaeology, radiocarbon dating, architectural history, and shellfish analysis. Each phase of our research is reviewed using quality control techniques. The most common of these is our reliance on peer reviews. Almost 80% of all reports are submitted to peer reviews, exclusive of client, grant, regulatory, or compliance review. In addition, all studies are extensively reviewed in-house. One part of this review process includes use of the Grammatik III® computer program. Using such techniques as the Flesch Reading Ease, Gunnings Fog Index, and Flesch-Kikncaid Grade Level, we ensure that our reports are readily comprehensible and easily read by the intended audience.

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